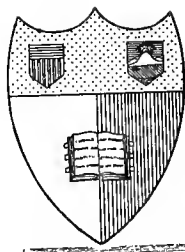


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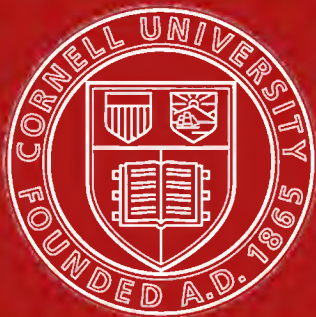
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# SUMMARY OF AIR INFORMATION

92

*SECOND SECTION, GENERAL STAFF  
GENERAL HEADQUARTERS  
AMERICAN EXPEDITIONARY FORCES*

**MARCH, APRIL, MAY 1918**

10.2.7

## NUMBERS

0 TO SERIAL No 9

1 TO 22

INCLUSIVE

NOTE :

In this re-print of the Intelligence Summaries in order to retain the original form in which they were published and that the reference numbers may be utilized, no attempt has been made to re-number the issues. The Summaries may be traced by the date of publication.

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# SUMMARY OF AIR INFORMATION

## AIR INTELLIGENCE BULLETIN

### NEW IDENTIFICATIONS

3 Pursuit flights .....	St. Quentin region .....	Newly formed units.
1 Pursuit flight.....	St. Quentin region .....	From Laon region.
1 Pursuit flight.....	Cambrai region .....	Formerly Flanders.
1 Art. Ob. Flight.....	St. Quentin region .....	Formerly in Champagne.
1 Protective Flight .....	Laon region.....	Formerly in Flanders.
3 Pursuit flights .....	Champagne region .....	Newly formed unit.
1 Pursuit flight.....	Western front.....	Formerly in Italy.

### AIRDROMES

SECTOR.	Confirmed :		Removed :	
	Sheds.	Hangars.	Sheds.	Hangars.
Flanders.....	12	..	..	..
Lille .....	3	..	..	..
Lens .....	25	19	1	..
Cambrai .....	6	..	..	..
St. Quentin .....	27	104	9	..
Laon .....	7	..	2	..

### ACTIVITY MARCH 20-24

Visibility generally poor March 20, 21 and 22 ; fair March 23 and 24. Outside of the area covered by the present offensive the most aggressive attitude has been south of the La Basse canal, and in the Woevre and Lorraine sectors. The use of airplanes in the present offensive for bombing and delivering machine gun fire against massed reserves has been quite marked.

### DISTRIBUTION OF GERMAN AIR FORCES, MARCH 24, 1918

Above identifications are included:—

#### FLIGHTS BY CLASS.

SECTOR.	PURSUIT.	BOMBING.	PROTECTIVE.	ART. OB.	RECONNAISSANCE.	TOTAL.
Flanders .....	8	6	7	6	7	34
Lille .....	..	3	2	3	2	10
Artois .....	13	7	4	12	6	42
Picardy.....	4	3	7	14	11	39
Laon .....	10	3	6	17	3	39
Rheims .....	1	..	..	5	3	9
Champagne .....	6	..	..	6	..	12
Argonne .....	..	..	..	1	..	1
Verdun .....	2	1	4	13	3	23
Woevre.....	5	2	1	4	6	18
Lorraine .....	1	..	..	6	1	8
Alsace .....	2	..	..	8	5	15
E. Europe .....	1	..	1	5	25	32
Italy .....	3	..	..	3	6	12
Asia .....	..	..	..	6	3	9
Interior.....	..	..	..	1	1	2
Not located .....	3	..	2	3	6	14
<b>TOTAL FLIGHTS</b> .....	<b>59</b>	<b>25</b>	<b>34</b>	<b>113</b>	<b>88</b>	<b>319</b>
<b>TOTAL MACHINES</b> .....	<b>1,062</b>	<b>200</b>	<b>204</b>	<b>678</b>	<b>528</b>	<b>2,672</b>

### INCREASE OF GERMAN AIR FORCES

From statements of prisoners and identifications the French conclude that the previous reports to the effect that the Germans expected to put 50 new pursuit flights on the front this spring were correct. Fourteen such flights have been identified since February 1st, bringing the total of such new flights to about 30.

It is also learned that protective flights are to be increased to 12 machines, thereby relieving the pursuit flights of all protective duty. A prisoner states that protective flights were withdrawn from the front for a course of instruction in combat, and that they would be expected to undertake low-flying duties in battle—preceding the infantry attack.

Bombardment flights according to the same prisoner will shortly be increased from 8 to 12 machines.

The increase in the number of units seems to be somewhat handicapped by a shortage of personnel despite the recent increases of the training establishments. At the end of February, the greater part of the pursuit flights had only a dozen pilots, and there were constant changes, vacancies being filled after considerable delay.

NOTE. — Air Intelligence Bulletin will be published as frequently as justified. Requests to be placed on mailing list for one or more copies are in order. Present distribution of single copies is as follows:

Chief, Air Service, A. E. F.  
C. O., A. S. Zone of Advance.  
Chief, A. S. 1st Corps, A. E. F.  
Chief, Technical Section, A. S. A. E. F.  
Colonel Day.  
Lieutenant Col. Milling.  
Lieutenant Col. Gorroll.  
2nd Aviation Instruction Center.  
3rd Aviation Instruction Center.  
7th Aviation Instruction Center.  
Assistant Chief, Air Service, Balloon Section.

SUMMARY OF AIR INFORMATION  
AIR INTELLIGENCE BULLETIN

NEW IDENTIFICATIONS

51st Pursuit Flight .....	Flanders.....	Newly formed unit.
36th Pursuit Flight .....	St. Quentin region .....	Formerly in Flanders.
1st Protective Flight .....	Flanders.....	Formerly St. Quentin region.

AIRDROMES

SECTOR.	Confirmed:		Removed:	
	Sheds.	Hangars.	Sheds.	Hangars.
Lens region.....	2	8	..	..
St. Quentin region.....	2	11	..	2
Laon region .....	11	3	..	..

MEASURES TAKEN TO PREVENT INFORMATION BY AERIAL ACTIVITY

General Ludendorf recently issued a series of secret orders concerning means to be employed by different kinds of airplanes in deceiving the enemy.

Airplanes undertaking long distance reconnaissances, or special missions to important sectors are always to return alone, without being accompanied by protective machines. This is in order not to reveal the importance of their mission ; and so as to be able to say, if captured, that they had mistaken their direction and erred in crossing the lines. It is understood that this procedure is constantly employed by captured hostile airmen.

THE ROLE OF AVIATION IN A GREAT BATTLE

From several sources the French have learned that the probable uses of German airplanes in a large offensive will be as follows:

(a) On the eve of the offensives, night attacks on the airdromes of the enemy by bombing flights. During the battle bombing by these flights of the enemy's rear, on assembled troops, cantonments, munition and food stores, important railroad centers, and villages behind the lines.

(b) Attacks on hostile infantry by pursuit planes. Pursuit flights also protect the operation of mopping-up flights composed of 12 or 13 planes of a new model. (Probably reorganized protective flights.) The purpose of the flights is to paralyze the observation system of the enemy by the destruction of their captive balloons, and observation and reconnaissance airplanes. Also by this action observation for German artillery is facilitated.

(c) The infantry is accompanied in its attack by combat airplanes (Schlachterflieger) and infantry airplanes (Infanterieflieger). These combat airplanes are of recent construction. They drop bombs and use their machine-guns against the hostile lines from a considerable height. After exhausting their ammunition, they return to their base for replenishment, and then return to the battle-field. They can carry either provisions or ammunition to the front line. The infantry airplanes are especially charged with liason, and must keep in close touch with the liason group (Nachrichtengruppen) with attack divisions.

Aside from these three principles of aviation, the Germans place a great importance on their tank airplanes (Tankflieger), charged with the duty of locating the points of assembly of hostile tanks and signalling them to the infantry. When the tanks cannot be brought under artillery fire, the tank airplanes put themselves in liason with the detachments charged with attacking tanks with grenades.

It is noteworthy that the Germans aim to employ both their observation flights, and protective flights furnished with new planes to bomb during the day.

Flight A 253 received special orders to bomb Lure.

Flight 262 at Le Sourd (17th German Army) was to be assigned the task of revictualing bodies of infantry.

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# SUMMARY OF AIR INFORMATION

## AIR INTELLIGENCE BULLETIN

### IDENTIFICATIONS

245th Artillery Observation Flight, St. Quentin reg. From Verdun reg.

### AIRDROMES

SECTION.	Confirmed:		Removed:	
	Sheds.	Hangars.	Sheds.	Hangars
Flanders .....	2	..	13	..
Lille.....	3	24	..	..
Lens .....	..	2	..	..
St. Quentin.....	1	38	..	1
Laon.....	1	17	..	..

New airdromes are also reported near Menin and Halluin (Lille Sector), but have not been confirmed.

### ORGANIZATION OF GERMAN BALLOONS

(FRENCH B. R. A. MARCH 15, 1918)

(a) A section is composed of two balloons. Four sections usually make up a balloon detachment, the headquarters of which is usually at the headquarters of the group (corps). At the headquarters of an army there is a commander of balloons.

(b) According to an order captured from the 1st German Army 15/4/17, a section of balloons serves permanently in each division for artillery observation, and is subject to the orders of the commander of the divisional artillery for tactical purposes. All balloons in excess of the requirements of divisional artillery may be held for special work such as long distance observation, or may be distributed to the divisions. In each group area all balloons, except those assigned to the divisional artillery, are under the orders of the detachment commander.

(c) The headquarters of the balloon detachment constitutes an intelligence center for the group. It consolidates results of reconnaissances, and sends the report to the commander of balloons, or other designated person at the headquarters of the army. When the enemy attacks on a wide front the staff of the detachment observes the progress of the attack, and transmits intelligence to the staff of the artillery.

- (d) The commander of balloons with the staff of the army:—
1. Informs the staff of the army concerning all matters pertaining to balloons.
  2. Remains in contact with the intelligence section and the commander of artillery at the headquarters of the army.
  3. Organizes the protection of balloons.
  4. Exchanges results of balloon reconnaissances with neighboring armies.
  5. Supervises the work of balloon detachments.

### ATTACKS ON OBSERVATION BALLOONS BY ENEMY AIRPLANES

(FRENCH B. R. A. MARCH 15, 1918)

The following observations have been gathered concerning procedure employed by German airmen in attacking captive balloons:—

The attack is sometimes made by one airplane, but this is becoming rather exceptional (About 15 %). In such cases the pilots use the following methods :

(a) They take advantage of the clouds to approach the balloon unobserved, and then dive at the last moment (about 50 %).

(b) They assure themselves of the advantage of the sun and dive on the balloon (about 40 %).

(c) They wait until the moment the balloon leaves its station to return to its shelter. It is then at a disadvantage as to defensive powers and rapidity of movement (about 10 %).

NOTE.—To encourage attacks on balloons the Germans offer money rewards and also give credit at the rate of three airplanes for two balloons.

### MATERIAL IN SERVICE OR ON TRAIL

#### SINGLE-SEATERS FOR COMBAT.

Albatros D.3 is considered as decidedly superior to D.5.

Albatros D.5. On March 5, 1918, a Albatros D.5 was brought down within the French lines. It did not offer any new peculiarity. The motor was a 160-175 H. P. Mercedes of 1,500 revolutions. The propeller was a Garuda. It appeared to be made of sheets of pine, mahogany, and walnut joined and fitted together against the grain. The airplane had about 400 perforating, 400 incendiary balls, and 500 cartridges for machine guns.

PFALZ MONOPLANE D. 3. A machine of this type was brought down by the English on December 27, 1917.

Spread of wings: 8 m. 90 ; length: 7 m. 10 ; weight empty (approximate): 695 kilos ; total weight ready for action: 962 kilos ; giving a total of about 40 kilos a square meter. The principal reservoir at pilot's feet: 65 litres. A reservoir on the right of the central element of the upper plane: 40 litres.

Upper plane: The same shape as on the "Albatros". It is constructed of wooden longerons and ribs, braced on the inside by wire, and strengthened here and there by metal plates. The edge on the side of attack and the edge in rear are of wood. The central section is entirely covered with three thicknesses of counter plate.

Lower plane The construction of the wings is similar to that of the upper plane. They are each reinforced by four metal plates. The two center plates are tougher than the other two. The third plate from the carling supports the upright which joins the two planes.

Uprights: They are somewhat the same V type as on the Nieuport, but instead of ending in a point at the base, they are rounded and present a U form. There are a pair of them for each wing. The uprights of the central section are also U form, but are reversed, and of a mere square type. They are different from the uprights of the previous Pfalz captured by the English.

Ailerons : They are for the upper plane only, and are counter-balanced. The controls pass through the lower planes, and from there to the upper plane. The guignols are similar to these of the D.5 Albatros.

Drift plane and rudder : The drift plane is made of a counter-plate of triple thickness, as on the Albatros. The rudder is counter-balanced, and has the same form as that of the L. V. G.

Stabilizers : They are made in one piece, and have the same form as these of the Fokker triplane. They are not counter-balanced, and are of wood.

It has a radiator of tubular type provided with a shutter operated from the pilot's seat in such manner as to reduce the cooling surface.

A. E. G. Although this machine has never been seen at the front, its existence is no longer to be doubted. It is due to appear there shortly. It is provided with a 200 H. P. motor and two machine guns, firing through the propeller. The first model was constructed at the end of August 1917, by the A. E. G. Society, from the plans of Lieutenant Hoehndorf. This officer belonged to the 14th Pursuit Flight. The plane proved to be very easy to handle in the air, but difficult on landing. Lt. Hoehndorf was killed in the early part of September during the testing, the machine having been put in a spiral.

Another plane was built by the A. E. G. Society. One of the modifications consisted in lengthening the fusilage about 15 cm. and in proportionately increasing the tail plane surface. This new machine was tried in November, 1917, at the flying field of the 14th Flight by Lt. Werner and found to be very satisfactory.

A prisoner declared that he had seen an A. E. G. fly side by side with a D.5 Albatros and hold its own. He also said that he had seen this A. E. G. do air liaison work between two patrols of Albatros machines which would seem to prove that it is more rapid than they are. He states that its speed at 3,500 meters should be at least 170 km. an hour ; and that it should raise to 3,000 m. in 14', and to 5,000 in 35'. These figures appear very unreliable.

Details: Total weight ready for action: 965 kilos; resevoirs for 1 1/2 hecto-liters of gasoline. Wolf Propellor with a diameter of 2 m. 78, and a pace of 2 m. 20: maximum width of the propellor, 19 c/m 5.

BERG (AUSTRIAN). A plane of this type has been brought down on the Italian Front. It has a 200 H. P. Austro-Daimler motor: the fusilage and the upper surface of the planes are camouflaged with stripes of a green and yellow mixture, giving it the appearance of burnt sand-stone: the total weight ready for action is about 873 kilos: the spread is 8 m. 15. The fusilage is counter-plated, supported on the inside by vertical uprights. The cross-bar work is done by wooden stays placed diagonally across the fusilage. There are ailerons only on the upper plane, and they are not counter balanced. The motor is a 6-cylinder vertical 200 H. P. Austro-Daimler, number 19.218, water-cooled. The 2 magnetos are Bosch, and the starting magneto is also a Bosch. The magneto control is connected with the gas control. The propellor is a Heiduk, number 2,796, and consists of 9 sheets of ash. According to the number on the nave, the pace is 2 m. and the diameter 2 m. 86. The principal reservoir is a pressure reservoir. It is located immediately behind the motor. It has a capacity of about 80 litres. A charging reservoir is situated behind the motor on the upper part of the fusilage, and has a capacity of 17 litres. The armament consists of 2 fixed machine guns, on either side of the motor, firing through the propellor. They bear the trade mark : Waffen-Fabrik, Steyer 1917, M. G. (Schwarzlose) M. 7/12. Armament by Bowden (R. F. C. 8/3/18).



## SUMMARY OF AIR INFORMATION

## AIR INTELLIGENCE BULLETIN

## NEW IDENTIFICATIONS

49th Reconnaissance Flight.....	Lille region .....	Formerly Eastern Front.
22nd Pursuit Flight.....	St. Quentin region.....	Formerly in Lorraine.
247th "A" Ob. Flight.....	St. Quentin region.....	Formerly Verdun region.
34th Protective Flight .....	Laon region .....	Newly formed unit.
234th Art. Ob. Flight .....	Champagne region .....	Formerly Laon region.
32nd Reconnaissance Flight.....	Verdun region .....	Formerly in Flanders.
215th Art. Ob. Flight .....	Verdun region .....	Formerly Eastern Front.
77th Pursuit Flight .....	Alsace.....	Newly formed unit.
5th Reconnaissance Flight .....	Alsace.....	Formerly Lille region
20th Reconnaissance Flight .....	Turkey .....	Formerly in Italy.

## HOSTILE ENEMY MATERIEL IN USE AND IN COURSE OF TRIAL

(FRENCH B. R. A., MARCH 15, 1918)

## COMBAT TWO-SEATERS.

FOKKER possesses engine of 240 to 260 H. P. (probably Mercedes 260 H. P.). The length is 8 to 9 meters. It is armed with three machine guns, two of which fire across its propeller.

HALBERSTADT has Mercedes engine, 160 H. P. Its speed is 180 km. at 2,000 m., but it will not climb rapidly. It allows good visibility and has two machine guns, one firing across propellor.

Numerous machines of this type will be distributed among protective flights.

## BOMBING AIRPLANES.

FRIEDRICHSHAFEN G3. One of this type, destroyed by British A. A. A. February 16, presented no novel peculiarities. The control is not double, but the controls are placed in such a way that the passenger who is beside the pilot can handle the airplane. A lever situated on the right side of the pilot's seat moves a wire which itself controls two springs mounted on the wings. The pilot in turning the lever from left to right pushes the wings back by means of the springs and the plane takes the position of rising without its being necessary to hold the wings in this position. The contrary movement of the lever causes the airplane to descend. This airplane is equipped with wireless. Its wings are of metal. It is provided with a heating system in which the generator is controlled by the left motor.

There are two turrets—one overhead and one behind. The front turret is 1 m. in diameter and weighs 15 kilos; the rear turret is 1 m. in diameter and weighs 10 kilos.

BOMBING TRIPLANES. The Schuckbert Company of Berlin is making trials of a triplane with three Mercedes engines.

## GIANT AIRPLANES.

EQUIPPED WITH 4 ENGINES. They have two types of engines of 250 to 260 H. P.; carry four passengers and 15 to 20 bombs of 50 kilos. Petrol for 7 or 8 hours is carried in 3 reservoirs. Each engine requires 70 liters an hour. The cloth is replaced by a material known as Aero. The fusilage is of wood interlined the pilot's position being protected by nickel plates of 8  $\frac{m}{m}$  thickness.

## ENGINES:

ARGUS engine. Experiments are being made with an Argus engine of 260 H. P. The cylinders have the same drilling and the same working as the old Argus engine; number of revolutions per minute 1500; number of cylinders increased from 8 to 12. The engine with the shaft of the propellor weighs 300 kilos.

BENZ ENGINE 500 H. P. The Benz Works are studying a motor of 500 H. P.

DAIMLER AUSTRIAN ENGINE. This was found on an Austrian plane, the type of Berg, shot down in Italy. It had 6 vertical cylinders with a bore of 150  $\frac{m}{m}$  and stroke of 173  $\frac{m}{m}$ . It can develop about 220 H. P., and weighs 341 kilos without oil and water.

## EXTRACTS FROM DIARY OF GERMAN OFFICER AVIATOR

This officer, who was a member of a bombing flight, was brought down on February 18 th. The following are extracts from the information obtained from his diary.

"All German aviation units on the Italian front will be replaced by Austrian units."

"The A. E. G. is of the best type of German bombing airplane. It has two 260 H. P. Mercedes engines, two Parabellum machine guns, and carries three aviators and 600 to 800 kilograms of projectiles."

"The most powerful type of bombing machine is the R (Riesen). It has six engines and can carry nine men."

"Zeppelins are giving way to airplanes, and though the production of airplanes in Germany is intense, the intervention of America is causing the authorities considerable worry. It is feared that production will hardly more than compensate for losses and deterioration of material. In order to decrease the number of losses only night bombing is allowed, but the anti-aircraft fire of the Allies has so improved that hardly a night passes without at least damage to one airplane."

"In bombing the pilot glides from a height of about 2500 meters at an angle of about 30 degrees, against the wind and toward the objective. The bombs are dropped at very short intervals, after which the pilot makes a rapid ascent to escape from the zone of anti-aircraft fire."

"Lately German aviators have been experimenting with a new parachute. It was tried first with bags of cement, and then with excellent results from a height of 1 000 meters, by an officer.

**PRECAUTIONS AGAINST BOMBARDMENT**

(FRENCH B. R. A., MARCH 15, 1918)

A barrage by balloons will protect the cities of Sarrebruck, Malstatt-Burbach, Brebach and all the line as far as Sarreguemines.

The Badische Anilin and Soda Factory at Ludwigshafen is being camouflaged for the purpose of escaping damage from night raids. At some distance from the factory there are installed electric lights, which by use of shades give the appearance of the factory. In the real factory, every light is put out as soon as the approach of planes is observed.

In order to deceive the hostile planes, the Bismarck column situated on the heights of Stuttgart has been painted gray.

Posters have been seen in Berlin announcing refuge in case of air raids.

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# SUMMARY OF AIR INFORMATION

## AIR INTELLIGENCE BULLETIN

### NEW IDENTIFICATIONS

(FROM FRENCH AND BRITISH INTELLIGENCE SUMMARIES)

211th Art. Ob. Flight .....	Flanders.....	Formerly in Lens region.
86th Pursuit Flight.....	Lille region .....	Newly formed unit.
221st Art. Ob. Flight.....	Lens region .....	Formerly in Flanders.
21st Protective Flight.....	Lens region .....	Formerly in St. Quentin Region.
266th Art. Ob. Flight.....	Lens region .....	Formerly in Lille region.
248th Art. Ob. Flight.....	St. Quentin region .....	Formerly in Champagne.
41st Reconnaissance Flight .....	Laon region .....	Formerly on Eastern front.
293rd Art. Ob. Flight.....	Laon region .....	Formerly in Lens region.
64th Pursuit Flight.....	Verdun region .....	Newly formed unit.
292nd Art. Ob. Flight .....	Verdun region .....	Formerly in Lens region.

### AIRDROMES

(FROM FRENCH AND BRITISH INTELLIGENCE SUMMARIES).

SECTOR.	Confirmed:		Removed:	
	Sheds.	Hangars.	Sheds.	Hangars.
Flanders.....	..	10	..	..
Lille region .....	1	4	..	..

### EQUIPMENT OF PURSUIT FLIGHTS

(BRITISH S. OF A. I.)

A prisoner of the 86th Protective Flight states that his flight is equipped with 16 D.3 type Albatross scouts. This is a type of machine which had practically become obsolete on the Western front ; it would therefore appear that the newer types of machines (D.5 Albatross, Pfalz and Fokker triplane scouts) are not available in large quantities.

### EMPLOYMENT OF UNITS

(BRITISH S. OF A. I.)

From captured documents it appears that the enemy in the present offensive is adopting the principle of attaching a flight to each division engaged in the attack. Sufficient reconnaissance and "A" flights are available on the present battle front to allow of one flight to be detailed to each front line division.

### DAYLIGHT BOMBING

(BRITISH S. OF A. I.)

From the statements of prisoners captured by the French it appears that reconnaissance two-seaters carry bombs (3-12 kg. bombs in the case of prisoner's machine) which are to be used on living targets in the course of a reconnaissance. Bombs were not carried by this type of machine during reconnaissance flights before the present offensive.

### PROTECTIVE FLIGHTS, NEW DESIGNATION

(BRITISH S. OF A. I.)

Prisoners of the 21st Protective Flight state that this type of unit is now known as a battle flight (Schlachtstaffel) instead of a proctetive flight (Schutsstaffel), but that this change has not yet been officially sanctioned.

### REPLACEMENT OF CASUALTIES

(BRITISH S. OF A. I.)

Prisoners state that considerable difficulty is now being experienced in replacing battle casualties, new machines taking 6-8 days to arrive from the Army Aircraft Parks instead of 3-4 in normal periods.

### ESTABLISHMENT OF AERIAL COMMUNICATIONS

(BRITISH S. OF A. I.)

"This morning the first aeroplane to make the journey to Kieff left the Aspern aerodrome, in the presence of the Inspector General of the aerial fighting Forces, Archduke Joseph Ferdinand. A demonstration took place at which the War Minister delivered a speech in which he announced that in a few days an aerial service between Budapest and Odessa would be opened. The line Vienna-Krakan-Lensberg is to be handed over in a few days to the public aerial mail service."

"The International Lufverkehrs A. C. ("Ilag") is being founded by the Austrian Lloyd, Mr. Castiglavin, the Ungarische Bank und Handels A. G. and the Lloyd Aeroplane Works at Osgood, for the purpose of establishing a network of aerial lines over the whole of Austria."

"The Ilag" proposes to run a main line Hamburg-Berlin-Vienna-Budapest-Belgrade-Sopia-Constantinople with branch lines to all important centres of traffic.

"One of the first lines will run from Vienna to Trieste and will carry mails and passengers from one town to the other in three hours."

**INTERROGATION OF PRISONER OF 64TH PURSUIT FLIGHT**

(FROM FRENCH 8TH ARMY INTELLIGENCE)

NOTE.—This flight is located at Joppecourt, opposite the Wœvre Sector.

**IDENTITY:**

The commanding officer (Offizierstellvertreter) of pursuit flight 64 came from the infantry, had one year's instruction at Graudenz and at the observers' school at Varsovie. Passed as pursuit pilot. Has been on the battle front since 17-3-18.

**ORDER OF BATTLE:**

Pursuit Flight 64 at present at Joppecourt, formerly at Mercy-le-Haut belongs to the 5th army and is a newly formed unit (probably in February). The prisoner says that at that same time the

65th Pursuit Flight was at Stenay (8th army).

66th Pursuit Flight (Baden) was near Metz.

Whereabouts of the 68th Pursuit Flight not known to prisoner.

**COMPOSITION AND COMMAND:**

The 64th Pursuit Flight has as yet only 12 "Pfalz" machines and 7 pilots, 3 of which are officers. Commanded by Lt. Hange.

It receives its orders from KOFL (Kommandeur der Flieger) of the 5th Army, Major Stritzius.

**SECTOR:**

The sector of Pursuit Flight (Jasta) 64 formerly extended from Avocourt to Etain. At present since March 20th, it extends from the Meuse to the Mosell (Pont-a-Mousson). The removal of the sector towards the S. E. was caused by the departure of Pursuit Flights 40 and 42 which have left Mars-la-Tour, the former on March 20th and the latter after March 25th. Even though its sector seems to cover the detachment of Army C, the 64th Pursuit Flight continues to receive orders from the KOFL 5. (On March 25th S. saw an order "Tagesbefehl" signed by Major Stritzius).

**MISSION:**

To chase aeroplanes and attack enemy balloons. The commander of the flights designates the groups (3 or 4 machines) who must hold themselves ready for action at different hours of the day. The balloon informs them by telephone of the presence of hostile machines, and the patrol starts out in pursuit. Generally, on accounts of the slowness in getting started, the patrol arrives too late. The attack of enemy balloons is made by order of the commander of the flight; they are generally carried by 2 machines, the 1st machine protecting the 2nd which does the attacking. As yet, this flight has neither an aeroplane nor a balloon to its credit.

**MACHINES:**

The Pfalz is inferior to the "Albatros", its one advantage is that it climbs faster. It is equipped with a 160 H. P. Mercedes engine, old model, but good, except the frequent defects in the metal. After a theory advanced at the school this engine can run 45 hours before it needs to be overhauled.

**MOVEMENTS:**

In February the 64th Pursuit Flight relieved the Bav. Pursuit Flight 15. On March 19th it occupied the site at Joppecourt which had become vacant by the departure of the 205th Reconnaissance Flight.

There are no indications as to the destination of these formations.

The bombing squadron at Metz left Frescaty about March 25th for Monmedy-Dun probable direction: Cambrai.

From another source, the park at Monmedy is at present at Arlen.

The 21st and 45th Pursuit Flights recently were still with the 5th army.

**BOMBARDMENT OF FRESCATY MARCH 25TH (?):**

A bomb fell on a hangar damaging 17 machines.

SUMMARY OF AIR INFORMATION

AIR INTELLIGENCE BULLETIN

NEW IDENTIFICATIONS

284th Art. Ob. Flight ..... Lens region ..... Formerly in Alsace.

AIRDROMES

SECTOR.	Confirmed		Removed	
	Sheds.	Hangars.	Sheds.	Hangars.
Lens region .....	2	14	..	..
St. Quentin region .....	..	19	..	..

SUMMARY OF SITUATION ON THE BRITISH FRONT FOR WEEK ENDING 31ST MARCH

(BRITISH SUMMARY OF A. I.)

(a) Distribution of the enemy's forces.

As might be expected, the general tendency is still to increase the enemy air forces in the battle area at the expense of other fronts.

In view, however, of the heavy losses sustained by the enemy and the acknowledged difficulty in replacing machines, it is doubtful if these transfers represent any actual increase to the enemy's strength.

In addition to the identification of a new formation (pursuit flight) in the Lille area, there are indications that the reinforcement of the battle front has possibly been extended as far north as Lille.

A summary of movement is given below :

To.	UNIT.	FROM.
Lille sector.....	86th Pursuit Flight .....	New formation.
Lens sector .....	46th Pursuit Flight .....	New formation.
	221st "A" Flight.....	Flanders.
	266th "A" Flight .....	Flanders.
	284th "A" Flight .....	Alsace.
St. Quentin sector.....	22nd Pursuit Flight.....	Balkans.
	245th "A" Flight.....	Verdun.
	247th "A" Flight .....	Argonne.
	248th "A" Flight .....	Champagne.
Laon sector.....	41st Reconnaissance Flight .....	Russia.

(b) Changes in accommodation.

The chief feature of the past week has been the increase of accommodation in the Lille sector.

In addition to a new aerodrome at Lozennes, sheds or hangars have been added to Hallemmes, Houplin, Ronchin and Merchin aerodromes.

This may be in preparation for an extension northwards of the battle front, but it is interesting to note that a captured aviator expressed an opinion that increases in this area were intended to mislead us as to the enemy's intentions.

(c) The enemy's activity.

The enemy's activity has been chiefly in the nature of low flying on the battle front, but, during the last few days, his scouts have shown more tendency to cross our line, though, except for ground work, their attitude cannot yet be described as aggressive.

AERIAL POSTAL SERVICE

EXTRACT FROM "SVENSKA DAGBLAD" OF 14, MARCH 18 (BRITISH SUMMARY)

"A novelty of special interest to Sweden is that aerial postal service has been opened between Berlin and Koln with an intermediary station at Hanover. This route was opened during February and with a trip each day in either direction. It has been a success, and only twice have the machines been delayed on account of fogs. Nothing has been reported in the Foreign Press about this aerial route and no secret has been made in Germany that there are several others in different parts of the country."

PRINCIPAL AVIATION BOMBS EMPLOYED BY GERMANS

Class .....	Explosive.				Incendiary.		
	300kg.	100 kg.	50 kg.	10 kg.	Minenwerfer	10 kg.	5 kg.
Total weight .....	300	91	55	11	108.5	10	5
Explosive or incendiary charge .....	180	53.5	20	1.2	47	3	1
Maximum diameter (m. m.).....	360	250	180	90	250	125	90
Total length (m.) .....	280	1.87	1.70	0.75	1.45	0.81	0.75
Length of tail piece (m.) .....	.80	.54	.50	.34	.70	.25	.24
Approximate date of appearance .....	Oct. '17	Oct. '17	Oct. '17	May '16	June '17	Feb. '17	Jan. '18

REMARKS:—

All of the above bombs are torpedo shaped, except the converted minenwerfer.

The minenwerfer bomb, fitted with a tail piece, has presumably been employed when sufficient supply of 100 kg. bombs was not available.

NOTE.—See Summary of April 2nd, for reference to establishment of other aerial communications.

## SUMMARY OF AIR INFORMATION, APRIL 3, 1918.

The 300 kg., 100 kg., and 50 kg. are provided with fuses which can be set for either percussion or delay action ; the 300 kg. and 100 kg. have two fuses each, one in front and one in rear. The other bombs shown above are provided with one percussion fuse each.

The 10 kg. bomb is especially effective against personnel as it gives a wide horizontal dispersion.

All torpedo shaped explosive bombs contain 60 % T. N. T. and 40 % Hoxanitrodiphenylamine.

The 300 kg. bomb has the same explosive charge as the most powerful torpedo of the German Navy.

Before an airplane drops a 300 kg. bomb, it must be throttled down, and on a glide, otherwise its equilibrium will be dangerously disturbed.

### DUTIES OF UNITS

(FRENCH BULLETIN, 2ND ARMY)

A Gotha belonging to the 3rd. Squadron was shot down on the 27th of March, 1918 within the French lines.

The interrogation of the passengers confirmed the information already given regarding the composition of this squadron ; Flights 13 to 18 are always parked in the region of Ghent.

Its mission is as usual, that of bombarding Dunkirk, Boulogne, Calais, and London. Its itinerary is the same, that via Ostende and the sea, following along the coast in order to silence the noise of the motors.

Gotha G 5 carries in general 9 bombs of 50 kgs. (or 4 of 100) and 700 liters of gasoline ; the effective weight of essence is 300 kgs. with 1,000 liters of essence extra.

Characteristics : twin-motor, three-seater, 260 H. P. (2 Maybach), 3 Parabellum machines guns, air cooled.

# SUMMARY OF AIR INFORMATION

## AIR INTELLIGENCE BULLETIN

### NEW IDENTIFICATIONS

(ESTABLISHED BY R. A. S.).

291st "A" Ob. Flight .....	Lille area.....	Formerly in Verdun region.
56th Pursuit Flight .....	St. Quentin region .....	Newly formed unit.

### GERMAN MACHINES

(BRITISH S. OF A. I., APRIL 2, 1918).

Information obtained from a prisoner of the 266th "A" Flight :

## (a) Armoured aeroplanes.

An armoured Albatros two-seater is being used for contact patrol work ; this is an old type machine with a 200 h. p. Benz engine ; 3 mm. sheet steel runs along the lower part of the fuselage, protecting the crew and the engine from machine gun fire from the ground. One machine of this type was in use in the prisoner's flight, but this was shot down by one of our machines ; it is slow and unwieldy.

NOTE. — An Albatros two-seater had previously been reported by prisoners as being in use for contact patrol work.

The Junker two-seater is stated to have given very good results, but there are not many machines of this type.

## (b) Scout machines.

The Albatros works are producing a machine on which they had already experimented last summer. This is a single-seater tractor biplane with a 160 h. p. Mercedes engine, which is different from the standard Albatros machine in that the wings are swept back in a very pronounced manner. Its performance is stated to be good, but the machine was not accepted by the military authorities last year for reasons unknown to the prisoner. The Albatros works made a present of a machine of this type to Richthofen, who, the prisoner heard, has flown it occasionally at the front. Improvements have been carried out on this machine, but it is not known whether any have as yet been officially accepted for use at the front.

Confirmation is required.

## (c) Engines.

The Basse and Solve works of Altena (Westphalia) are constructing an aircraft engine which is now being used at the front ; this is a 6 cylinder 250 h. p. engine closely resembling the Maybach ; it is fitted with the same device as the latter engine to give extra air at heights. At present it is being used in a Rumpler two-seater only.

The 200 h. p. Benz engine is also in some cases fitted with the device for extra air, and the prisoner states that a L. V. G. two-seater in his flight was thus equipped.

## (d) Giant aeroplanes.

While at Breslau, in November 1917, the prisoner saw a giant machine which was then undergoing tests ; this was a biplane—built by the Linke, Hoffman Works (railway carriage works)—with four 250 h. p. Mercedes engines coupled in pairs, each pair driving one tractor propeller on either side of the fuselage. Two pilots were accommodated in the fuselage and two mechanics, one for each pair of engines, in the engine compartment below the fuselage ; one or more observers sat in front of the pilots and an aerial gunner immediately behind them. Further there was a cockpit in the fuselage near the tailplane, to accommodate an aerial gunner. The span of the machine was some 100-110. The machine which prisoner saw was burnt in the air, but he has heard that improvements are being made on the type.

### EFFECT OF AIR TACTICS

Prisoners captured by the British state that losses caused by bombs and machine gun fire from the air have been heavy, and that the moral effect of this method of attack is very great. That after an attack on the 22nd March the 100th. Body Gren. Regt. relieved the 40th Fus. Regt., but were so severely bombed from the air that they had to be again relieved on the following day. A battery of foot artillery was destroyed by the bombs at the same time, and its detachment, together with 12 horses killed.

### GERMAN AIRMEN

(FROM BRITISH S. OF A. I.).

Captain Ghede commands the 266th "A" Flight.  
Lieutenant Leu commands the 21st Protective Flight.  
Lieutenant Matthey commands the 45th Pursuit Flight.  
Lieutenant von der Marwitz commands the 30th Pursuit Flight.  
Lieutenant Haffner commands the 86th Pursuit Flight.

SUMMARY OF AIR INFORMATION  
AIR INTELLIGENCE BULLETIN

NEW IDENTIFICATIONS

(FRENCH 2ND BUREAU, ARMEES DU NORD ET DU NORD-EST).

48th Pursuit Flight .....	Peronne-Chauny region .....	Formerly unlocated.
38th Protective Flight .....	Peronne-Chauny region .....	Newly identified unit.
7th Pursuit Flight .....	Laon region .....	Formerly Flanders.
36th Reconnaissance Flight .....	Rheims region .....	Formerly Verdun region.
10th Reconnaissance Flight .....	Champagne region .....	Formerly in Alsace.
43rd Reconnaissance Flight .....	Champagne region .....	Formerly eastern front.
40th Pursuit Flight .....	Unlocated .....	Left Woevre region.
42nd Pursuit Flight .....	Unlocated .....	Left Woevre region.
65th Pursuit Flight .....	Unlocated .....	Left Verdun region.

NEW ENEMY AIRDROMES ON THE BATTLE FRONT

(BRITISH S. A. I., APRIL 3, 1918).

In addition to increased accommodation at existing airdromes, the following advanced airdromes opposite the battle front have now been located by air observation. Photographs have not, in any case, yet been obtained:—

South of the Somme :

Rosieres.  
Manicourt.  
Nesle.  
Liancourt, S. E. of Nesle.  
Golencourt, S. E. of Nesle.  
Berlancourt, S. E. of Nesle.  
Villeselve, S. E. of Nesle.

North of the Somme :

Bapaume.  
Leschelle.  
Longavesnes.

DISTRIBUTION OF GERMAN AIR FORCES APRIL 2, 1918

FLIGHTS BY CLASS.

Sector.	Pursuit (18 machines).	Bombing (12 machines).	Protective (6 machines).	Observation (6 machines).	Total.
Flanders .....	9	6	7	14	36
Lys-Arras .....	4	3	5	13	25
Arras-Bapaume .....	11	6	3	18	38
Bapaume-Peronne .....	1	..	3	9	13
Peronne-Chauny .....	7	3	2	9	21
Laon .....	11	3	6	20	40
Rheims .....	2	..	..	10	12
Champagne .....	5	..	..	8	13
Verdun .....	2	..	4	13	19
Woevre .....	2	3	1	8	14
Lorraine .....	..	..	..	7	7
Alsace .....	3	..	..	10	13
E. Europe .....	1	..	1	24	26
Asia .....	..	..	..	7	7
Interior .....	..	..	..	1	1
Not located .....	8	..	3	30	41
Total Flights .....	66	24	35	201	326



# SUPPLEMENT

## To Summary of Air Information

### AIR INTELLIGENCE BULLETIN

OPERATIONS OF BRITISH FLYING CORPS

The following is a Summary of the operations of the Royal Flying Corps for the period of 13th March to 18th March, inclusive, the week preceding the present offensive, compiled from Royal Flying Corps Communique—No. 131, 20. 3. 18.

I. RESULTS OF COMBATS.

Hotisle Machines :	
Brought down.....	98
Driven down out of control.....	46
Total .....	144
British machines missing.....	36

2. RESULTS OF OTHER OPERATIONS.

Photographs taken .....	10 526
Reconnaissances :	
By day .....	169
By night .....	13
Photographic, spec.....	13
	195
Gun pits destroyed.....	79
Gun pits damaged .....	184
Explosions caused.....	282
Fires caused .....	178
Zone calls sent down.....	383
Targets registered by balloons.....	134
Hostile batteries located by balloons.....	48
Hostile batteries sucessfully engaged for destruction with aeroplane observation.....	444
Hostile batteries engaged and neutralized with aeroplane observation .....	58

3. BOMBING OPERATIONS.

During the period under review more than 100 tons of bombs were dropped on dumps, billets, railway sidings, junctions and stations, huts, bridges, aerodromes, villages, towns and miscellaneous targets. The following table summarizes the quantity of the several types of bombs used each day :

NUMBER OF BOMBS DROPPED

Date :	15 lb.	25 lb.	40 lb.	112 lb.	230 lb.	250 lb.	Wgt?
12th.....	15	910	10	82	1		
13th.....		1,307	2	67	2		
14th.....		357		8			74
15th.....		784	4	49			
16th.....	1	1,499	1 25	95	8		
17th.....		931	1 11	77			
18th.....		954	1 8	71	2	7	
Total .....	1 15	6,742	60	449	13	7	74

4. LONG DISTANCE BOMBING RAIDS. (8th Brigade).

March 12th. No. 55 Squadron carried out a long distance bomb raid, this being the third within the last four days. Nine machines dropped one 230-lb. ten 112-lb. and ten 40-lb. bombs on the railway station, factories and barracks at Coblenz (a distance of 130 miles). Two fires were started and bursts were seen on the objective. A very large explosion was caused, a building in the south-west corner of the town being hit. 72 plates were exposed. All machines returned.

March 13th. On the afternoon of the 13th instant, nine machines of No. 55 Squadron left to bomb the railway station and barracks at Freiburg (Germany). Eight machines reached the objective and dropped two 230-lb., 12 112-lb., two 40-lb., and four 25-lb. bombs from 14,000 feet. Bursts were seen around the power station, in the railway station and on the railway north of the town. 41 photographs were taken. After the formation dropped the bombs it was attacked by 16 hostile machines. Three of our machines are missing.

March 16th. Ten machines of No. 55 Squadron left to bomb military objectives at Mannheim. Three machines returned, two with engine trouble and one shot through the petrol tank by E. A. The remaining seven machines were unable to reach their objective, as they ran into thick clouds, but they attacked the barracks and railway station at Zweibrücken from 12,500 feet dropping 14 112-lb., six 25-lb., and four 40-lb. phosphorus bombs. Bursts were seen on the barracks and all round the station. Four E. A. attacked the formation but were driven off. All machines returned.

March 17th. On the morning of the 17th instant, ten machines of No. 55 Squadron left to bomb military objectives at Mannheim. One returned with engine trouble and the remainder ran into thick clouds prevented them from reaching their objective. Twenty 112-lb., nine 25-lb., and three 40-lb. bombs were dropped from between 13,000 and 15,000 feet on the factories and railway station at Kaiserslautern. Two direct hits were obtained on the station, one truck being set on fire, and a large fire started. Sixteen E. A. attacked the formation but were driven off. Twenty-seven photographs were taken, showing excellent results. All machines returned.

March 18th. Ten machines of No. 55 Squadron left to bomb military objectives at Mannheim on the Rhine. Nine machines reached the target and dropped 18 112-lb., 10 25-lb., and two 40-lb. bombs from an average height of 13,500 feet. As a result bursts were seen as follows: Direct hits on the Badische-Aniline und Soda Fabrik, causing a huge cloud of black and white smoke to ascend, four direct hits on the docks, one on and one along-side the Sulzer Factory, and many others round the objective. The bombing machines were attacked by two formations of E. A. scouts (14 machines) over the objective. A combat ensued, as a result of which two E. A. were driven down out of control, but owing to the fighting and to the fact that there was a certain amount of mist these machines were not actually seen to crash. They were, however, followed down for 5,000 feet and were then still completely out of control. A total of 36 plates were exposed with good results. All our machines returned safely.

#### 5. ATTACK ON AERODROME.

An attack on Mont d'Origny Aerodrome was carried out on March 14th by 19 machines of Nos. 24, 48 and 84 Squadrons; 42 bombs were dropped on, and 4,760 rounds fired at, hangars on the aerodrome and other favourable targets. No. 24 Squadron dropped 12 bombs from 100 to 2,000 feet. One hangar was set on fire, and at least two others were damaged; 100 rounds were fired into the nose of the Pfalz Scout which was seen protruding through a hangar; 910 rounds were fired into horse transport, troops, etc., on the way back.

No. 48 Squadron dropped 16 bombs from 1,000 to 2,000 feet on various targets and fired over 3,600 rounds at troops on the road, billets and lorries, driving the troops to cover.

No. 84 Squadron missed the objective and got four bombs on barges at Bernet from 500 feet, one of the barges was hit. Fifty rounds were fired into the barges, and on the way back 200 rounds were fired at motor cars on the road.

#### 6. RECORD WORK OF 102 SQUADRON. (Night Bombing Squadron).

Night 12th/13th. "No. 102 Squadron dropped 552 25-lb. bombs on billets opposite the front of the Third Army".

"The work done by No. 102 Squadron on the night of the 12th/13th constitutes a record as regards the number of bombs dropped by one squadron in one night. All pilots except three, made three trips, four pilots made four trips, and two made five trips. The first flight started at 7.44 p. m. and the last machine landed at 4.10 a. m. Over 11,600 rounds were fired at ground targets".

NOTE.—This Squadron, in addition to the above, on the night of the 15th/16th dropped 470 25-lb. bombs on Bourlon, Tillory and Fontaine Notre-Dame, causing four large fires, and nearly all pilots making three consecutive trips; on the night of 16th/17th dropped 134 25-lb. bombs on rest billets opposite the Third Army front; and, on the night of the 17th/18th dropped 50 25-lb. bombs on Emerchicourt Aerodrome and 100 25-lb. bombs on billets.

#### 7. TACTICS.

On March 18th Naval Squadrons No. 5 (5th Brigade) bombed Burigny Aerodrome with a view to drawing up hostile machines which were to be attacked by Nos. 54 and 84 Squadrons. The plan was successful, a fierce fight taking place in which four E. A. were brought down and eight driven down out of control.

# SUMMARY OF AIR INFORMATION

## AIR INTELLIGENCE BULLETIN

### NEW IDENTIFICATIONS

(BRITISH SUMMARY OF AIR INTELLIGENCE, APRIL 5, 1918).

56th Pursuit Flight .....	Bapaume-Peronne region .....	Formerly in Peronne-Chauny region.
277th Art. Ob. Flight .....	Bapaume-Peronne region .....	Formerly in Laon region.
66th Pursuit Flight .....	Woivre region.....	Newly formed unit.

### AIRDROMES

(BRITISH SUMMARY OF AIR INTELLIGENCE, APRIL 4, 1918, AND APRIL 5, 1918).

Region.	Confirmed.		Removed.	
	Sheds.	Hangars.	Sheds.	Hangars.
Arras-Bapaume .....	..	2	..	..
Bapaume-Peronne.....	..	22	..	..
Peronne-Chauny.....	..	76	..	..

In addition, R. A. F. observers report airdromes at the following locations:—

In the vicinity of Nurlu.  
South-east of Bapaume.  
In the neighborhood of Lehaucourt.

Airdrome reported by agent:—  
2 km. N. W. of Ath.

### SIMULATED AVIATION CAMPS

(FRENCH VIIITH ARMY BULLETIN APRIL 1, 1918).

According to the statements of aviators taken prisoner on the front of another army, the location of dummy aviation fields (Scheinhafen) is said to be indicated at night by one green and two white fires; the real camps, however, are indicated by two white fires and one red, lighted at the request of the airplane, communicated by firing one white star rocket followed by one red rocket.

### DUMMY AIRDROMES

(BRITISH S. of A. I., APRIL 4, 1918).

A prisoner captured in the Hauthem sector states that the Germans were using every method to create the impression that an offensive was shortly intended on this front. He gave as an instance that the airdromes recently constructed at Menin and Halluin were dummy ones.

It will be remembered that aviator prisoners captured recently have given similar information.

This is confirmed to a certain extent by photographic evidence. On airdrome No. 198, at Halluin, can be seen what, at first sight, appears to be an aeroplane. On closer examination it is evident that this is more a counterfeit, probably staked out in cloth on the ground.

### MARKINGS OF MACHINES

(FRENCH IIND ARMY BULLETIN, APRIL 3, 1918).

Anti-aircraft artillery reports that it has seen on the front of this army an airplane with inverse trapezoidal wings, showing under the wings black crosses and under the fuselage a three colored cockade of black, white and red.

### AUSTRIAN AVIATION

(FRENCH BULLETIN, ARMIES OF NORTH AND NORTH-EAST, APRIL 4, 1918).

The following information was given recently by an Austrian aviator recently captured on the front of the 3rd Italian Army. It completes the information formerly given in regard to the general organization and tactics of the Austrian aviation.

#### ORGANIZATION :

The aviation of the Austrians should include about seventy companies (in place of the sixty-one noted in November). The average increase per month would be (?) ; it would effect almost inclusively combat companies.

#### COMMAND :

Near the headquarters of each army it would appear that the Chief of the Air Service of the Army is to be found, now called Commander of the Aircraft Troops (KOLUFT, Kommandant der Luftfahr-truppen) and no longer Staff Officer for the Aircraft Troops (Stoluft, Stabs-Off. der L. F. T.).

Between the Koluft and the aviation companies there does not seem to be any intermediate organization; all orders are given directly to the companies by the Koluft; all the reports of reconnaissance, photographs, etc., are sent direct to the Koluft.

#### DUTIES AND EQUIPMENT OF COMPANIES :

The slight degree of specialization in the Austrian companies has been confirmed; there are two types only: combat and reconnaissance. There is only one company for bombing (there is no Austrian bomb-

ing unit on the Piave front). Every company of reconnaissance seems to include from eight to ten planes for reconnaissance and three or four combat planes; the reconnaissance machines are employed indiscriminately by the infantry and artillery. There are no specialized units for artillery as in German aviation. They are furthermore the same machines which carry on the bombing.

The Austrian aviators must have received orders not to enter combat with enemy aviators without reason; their tactics seem to be defensive in order that they may be able to carry out their different missions.

It is recalled that in 1917 the German Command probably gave similar directions to its flights to the effect that they were not to expose themselves to small losses, because of the difficulties of replacing equipment.

#### MACHINES :

The types of machines seem to have remained unchanged since November. The aviator does not know of a single new type. He reports simply the recent appearance of a new motor called Benz of 240 horsepower, which when installed on the Brandenburg would bring its speed to between 140 and 150 kilometers.

#### AVIATION CAMPS :

The nearest to the front are apparently combat planes; the most distant, the reconnaissance planes (because of their slowness in rising). One tent of the Besseneau type would in general contain machines for one company. In the camps the relations between the Austrian aviators and the German are apparently very delicate; the officers of the 4th Flying Company are reported to have forbidden their under-officers to have anything to do with their German comrades.

#### SUMMARY OF THE INFORMATION ON AUSTRIAN AVIATION :

1. A slight increase in number, but little progress in equipment.
2. A tendency to increase the combat planes and to reserve them for combats in groups.
3. The greater centralization of available equipment.

CHARACTERISTICS OF THE PRINCIPAL GERMAN AIRPLANES IN SERVICE OR UNDERGOING TRIAL .

From a G.Q.G chart and  
French and British Int.  
Reports.

Class	No of Seats	No of Planes	Make.	Type.	Motor.		Measurements			Armament.	Weight in kilograms.			Climbing Powers.	Hor. Speed	Altitude attainable	Remarks.	
					Make	H.P.	Wing Surface (Sq.M.)	Wing Span (M.)	Length (M.)		Empty	Load	Total					
Combat	1	2	Albatros	D-3.	Mercedes	160	21	9	7	2 Spandau M.Gs	670	240	910	4000 in 21'20"	163 at 3000m 149 at 4000m	5500		
				D-5	Mercedes	160	21	9	7.5		620	258	878	4000 in 20'	200 at ?		Reported as breaking in air.	
				D-5A		200					680	235	915				Strongly built.	
			Pfalz.	D-3.	Mercedes	160	18 to 23	8.9	7.1	2 ? M.G.s.	694.9	1699	864.8	1500 in 5'5"			Very fast	
			A.E.G.			200				2 M.G.s.?							Reported as fast	
		3	Pfalz.		Adler.						375	195	570	4560 in 18'	200 at ?			
		Fokker.		Oberursel	110		7	5.8	2 Spandau. M.G.s.				4500 in 17'					
	4	Fokker.		Oberursel Grand	130 350													
	2	2	Fokker.															Fast, good climber, responds readily.
			Halberstadt.		Mercedes	160								3050 in 9'				Affords good observation.
Albatros																		
Hannover				Opel Argus	180 200		11 ?	7 ?	2 M.G.s.								Reported as having caught fire in the air because of carburettor	
Observation	2	2	Rumpler	C4 and C5	Mercedes	260	33.5	12.6	8.4	2 M.G.s. 1 Maxim and 1 Parabellum	1080	450	1530	2000 in 7'40" 3000 in 12'50" 5000 in 38'	168 at 2000m 162 at 3000m 150 at 4000m	6600	Poor visibility	
					Maybach	260					1035	500	1535	5000 in 30'	174 at 2000m 170 at 3000m 148 at 5000m			
			D.F.W.	C4 and C5	Benz	225	42.5	13.0	8	2 M.G.s. 1 fixed and 1 movable	900	572	1472	2000 in 13' 4000 in 33'30"	157 at 2000m 153 at 3000m	5200		
			L.V.G.	C5	Benz	225	44.25	13.85	7.5		960	540	1500	2000 in 14' 3000 in 20'	150 at 3000m	5200		
			B.F.W.(Albatros)	C10 and C12	Mercedes	260	42											
			A.E.G. (Armored)	C ?	Benz	225					1720						Clumsy	
			Junker (Armored)	C ?	Benz	225					2100			3500 in 60'	135 at ?	3500	Very satisfactory	
			Albatros (Armored)	C ?	Benz	200?											Reported as fast.	
Bombing	3 and 4	2	Rumpler.	G	2 Mercedes	260				3 Parabellum M.Gs. ?								Difficult to manage
			Gotha.	G4 and G5.	2 Mercedes	260	95	24	16					1500 in 7' ? 2000 in 18'	135 ?	4700		
			Friedrichshafen	G2	2 Benz	225	75	20	11		2200	953	3153					
				G-3 (four seats)	2 Mercedes	260	100	23.6	13.2	2 Parabellum M.Gs.	2680	1235	3915		145 ?	4500 ?	Carries one M.G. on bombing expeditions	
			A.E.G.	G4.	2 Mercedes	260	75			3 Parabellum M.G.s.				4000 in 35'	120 (lowest)		Best bombing plane	
			Riesen. (Giant)	Gotha ?	3 Mer.(3 prop)	260	36	45 ?	30 ?						115 ?			
					4 Mer.(2 prop)	260												Bomb carrying capacity reported to be 6000 lbs.?
					4 Max?(4 prop)	250									5000 in 30' ?		6000 ?	
					5 ?													
6 Mer.(3 prop)	4-260 2-160				48 ?		Several M.Gs. 2-37 m.m guns. ?					150 ?		Crew of 9 men ?				

SUMMARY OF AIR INFORMATION, APRIL 8, 1918.

ing unit on the Piave front). Every company of reconnaissance seems to include from eight to ten planes for reconnaissance and three or four combat planes; the reconnaissance machines are employed indiscriminately by the infantry and artillery. There are no specialized units for artillery as in German aviation. They are furthermore the same machines which carry on the bombing.

## SUMMARY OF AIR INFORMATION

## AIR INTELLIGENCE BULLETIN

## IDENTIFICATIONS

(BRITISH SUMMARY OF AIR INTELLIGENCE, APRIL 6, 1918).

236th Art. Ob. Flight..... Verdun region ..... Formerly in Flanders.

## AIRDROMES

(B. DE R. 2ND ARMEE, APRIL 5, 1918).

## VERDUN REGION.

Longuyon, south of the town, seven hangars, more hangars seem to be in course of construction.

Rouvrais.—Six tents.

Mont-Sud.—Several hangars at the Northwest edge of the woods south of the Landres-Bonvilliers road; showing indication of occupation.

## GERMAN AIRMEN

(BRITISH S. OF A. I., APRIL 4, 1918).

Lieutenant Kuppers commands the 48th Pursuit Flight.

Lieutenant Hango commands the 64th Pursuit Flight.

Lieutenant Fricke commands the 3rd Reconnaissance Flight.

The *Norddeutsche Allgemeine Zeitung* (17th March) publishes the following list of leading German airmen with their victories up to the 1st March:—

*Rittmeister Freiherr von Richthofen .....	63	Lieutenant Udet .....	11
*Lieutenant Bongartz .....	30	Lieutenant Bethge (since killed) .....	18
*Lieutenant Buckler .....	30	Lieutenant Kissenberth .....	18
*Captain Berthold .....	28	Lieutenant Thuy .....	18
*Lieutenant Bernert .....	27	Sergt. Baumer .....	18
*Lieutenant Freiherr von Richthofen .....	26	Lieutenant Gotsch .....	17
*Lieutenant Wusthoff .....	26	Lieutenant Goring .....	16
*Lieutenant Schleich .....	25	Lieutenant Julius Schmidt .....	15
*Captain Ritter von Tutschek (since killed) .....	24	Lieutenant Haustein .....	15
*Lieutenant Klein .....	22	Sergt. Thom .....	14
Lieutenant Kroll .....	20	Lieutenant Jakobs .....	12
Lieutenant Menckhoff .....	20	Lieutenant Schlenker .....	12
*Lieutenant Lorzer .....	20		

\*Decorated with the Order "Pour le Merite"

NOTE.—The names of Lieutenant von Bulow and Lieutenant Dostler, who have been reported missing for some time, have been deleted from the above list. No information as to the date of Bethge's death is available.

## EQUIPMENT OF UNITS

(BRITISH S. OF A. I., APRIL 6, 1918).

The 48th Pursuit Flight (new formation) is equipped with 10 Pfalz single seater machines. (Prisoner's statement).

This is much below the normal establishment (18). The new formation flights do not appear to have been brought up to full establishment.

## GERMAN AIRCRAFT

(BRITISH S. OF A. I., APRIL 6, 1918).

A recently captured pilot states that machines now being sent out to the front are less reliable than formerly, and that this is partly due to the fact that the material used in their construction is of comparatively poor quality, but, more especially, owing to the unskilled labor now employed in factories. The prisoner stated that skilled workmen and mechanics have been called up in large numbers to supply the demand for such men in the Flying Corps at the front.

NOTE.—This does not seem to be universal. Although a captured Fokker triplane shows evidence of poor workmanship, a Hannoveraner machine recently brought down was extremely well finished. It is possible that only certain factories have been affected.

SUMMARY OF AIR INFORMATION

AIR INTELLIGENCE BULLETIN

NEW IDENTIFICATIONS

(FRENCH AND BRITISH SOURCES).

33rd Reconnaissance Flight.....	Peronne-Chauny region .....	Formerly Flanders.
47th Reconnaissance Flight.....	Champagne region.....	Formerly Russia.
45th Pursuit Flight.....	Laon region .....	Formerly Verdun region.
7th Bombing Flight.....	Unlocated .....	Left Woevre region.
9th Bombing Flight.....	Unlocated .....	Left Woevre region.

AIRDROMES

(CONFIRMED BY PHOTOGRAPH, R. A. F., APRIL 7, 1918).

Region.	Additional.		Vacated.	
	Sheds.	Hangars.	Sheds.	Hangars.
Peronne-Chauny .....	..	3	..	..

GERMAN AIR OPERATIONS IN THE RECENT OFFENSIVE

ORGANIZATION PROGRAM. In the fall of 1917 the German High Command planned a substantial increase in air forces, having probably been influenced in this decision by press accounts of the American project. Existing factories were increased and some Zeppelin and automobile factories were converted to the manufacture of airplanes. Existing training schools were filled to maximum capacity, and a number of new schools were opened. Many of the more experienced pilots were withdrawn from the front to act as instructors and to command the new units. The increase was to be mostly in pursuit and bombing units.

SUCCESS OF PROGRAM. It appears that manufacture did not progress according to expectations, owing to scarcity of experienced mechanics, strikes, and failure of products in tests. On March 15, 1918, pursuit and bombing units were below the prescribed strength in both equipment and personnel, though many new units had appeared.

AIR SITUATION MARCH 15. On this date the Allies were credited with control of the air. This expression would indicate that German airplanes had operated at a disadvantage, and that on the contrary the Allied air reconnaissance had proceeded satisfactorily. The same discretion characterizes German air tactics and land tactics. They attempt to conserve personnel and material by refusing the "Sporting chance". It is, consequently, possible to mistake for inferiority what is in reality discretion. Under these circumstances it is believed that the situation on March 15th can best be described as "implying an Allied superiority in the air".

PREPARATORY STAGE. The German air mission previous to March 15 may be considered under the following classification of duties :

- (a) Artillery registration.
- (b) Photography of defenses.
- (c) Observation and photography of supply systems.
- (a) That the registration had been satisfactory is proved by statements of experienced British officers, who describe the artillery fire which preceded the assault as "the most effective they had ever seen".
- (b) The facility with which the Germans passed through British wire, and traversed the trench systems, indicates that little had been lacking in the completeness of their photography.
- (c) It is of course impossible to estimate to what extent the German High Command depended on their air service for information of Allied rear areas. Part of such information might have been obtained from other sources. The effectiveness of their night bombing units and long range artillery attests to a satisfactory functioning of whatever sources they relied upon for this information.

CONCENTRATION STAGE. During this period (March 15 to March 21) the air mission is considered as follows :

- (a) Prevention of Allied observation of German concentration.
- (b) Observation of changes in Allied dispositions.
- To accomplish these ends the German air units became markedly aggressive, and there ensued an unusual number of air fights.

ATTACK STAGE. The air mission during the attack stage will be considered according to the following duties :

- (a) Bombing.
- (b) Combat—protection of observation airplanes.
- (c) Protection against low flying battle airplanes.
- (d) Operation against Allied foot troops.
- (e) Liaison.
- (f) Observation.
- (g) Supply.
- (a) The operations of bombing units, whose objectives were the Allied supply and transportation centers, commenced the night before the attack ; this activity was continued on every clear night. Judging from the delay and inconvenience caused to the Allies, the decision of the Germans to produce machines with a large bomb capacity would seem to have been justified.



(b) The role of pursuit units in protecting observation airplanes does not appear to have been successfully carried out, so far as can be judged from reports received as well as from results apparently obtained.

(c) The German troops are reported to have been rushed forward in masses along roads under the protection of the air and anti-aircraft services. Allied airplanes inflicted large casualties on these bodies, the resulting losses of machines being mostly caused by ground fire. The use of German machines for protection against low flying Allied machines would therefore seem to have been unsuccessful. On the other hand British aviators report that their operations against ground troops did not stem the advance.

(d) The Germans do not appear to have used their airplanes very often against foot troops by day.

(e) Airplane liaison work, judged by the manner in which the attack progressed : must have been excellent.

(f) Observation, as already noted, does not appear to have been satisfactory ; it is believed this was mainly owing to lack of protection.

(g) German air units have been trained in the supplying of troops. To what extent this was practiced in the present offensive is not known. There is to be noted, however, in this connection, the surprise of the Allied troops at the apparently inexhaustible supply of ammunition with German machine guns during the advance.

#### CONCLUSIONS.

1. The German conception as to the desirability of an increase in bombing and pursuit units has been justified.

2. The German air service performed its duties satisfactorily during the preparatory stage.

3. The Germans failed to obtain control of the air during the concentration stage, though they were successful in masking their troop movements.

4. The failure to obtain control of the air resulted in an unsatisfactory observation service during the attack.

5. Properly to balance the German air service it will be necessary for the enemy to increase further his pursuit groups. The performance of this other air units appears to answer fully the tactical requirements of the operations.

SUMMARY OF AIR INFORMATION  
AIR INTELLIGENCE BULLETIN

NEW IDENTIFICATIONS  
(FRENCH AND BRITISH SOURCES).

7th Pursuit Flight.....	Flanders .....	Formerly Laon region.
48th Reconnaissance Flight.....	Lys-Arras region .....	Formerly Flanders region.
205th Art. Ob. Flight.....	Lys-Arras region .....	Formerly Verdun region.
232nd Art. Ob. Flight.....	Bapaume-Péronne region.....	Formerly in Italy.
17th Protective Flight.....	Bapaume-Peronne region.....	Formerly Verdun region.
28th Protective Flight.....	Peronne-Chauny region .....	Not previously identified.
296th Art. Ob. Flight.....	Peronne-Chauny region .....	Formerly Verdun region.
285th Art. Ob. Flight.....	Laon region .....	Formerly Verdun region.
65th Pursuit Flight.....	Verdun region .....	Formerly in Verdun region, but lately unlocated.

AIRDROMES  
(CONFIRMED BY PHOTOGRAPH, R. A. F., APRIL 10, 1918.)

Region.	Additional.		Vacated.	
	Sheds.	Hangars.	Sheds.	Hangars.
Arras-Bapaume .....	..	..	..	4
Bapaume-Péronne .....	..	8	..	..

AIR RAIDS INTO GERMANY

The following table from the British Summary of Air Intelligence 4th April, shows the raids carried out by British airplanes on objectives in Germany during March :

Date.	Locality.	Military Objective.	Weight of Bombs dropped In lb.
6- 7.3.18	Frescaty.	Aerodrome.	395
9.3.18	Mainz.	Railway and Factories.	2,532
10.3.18	Stuttgart.	Railway and Daimler Works.	2,842
12.3.18	Coblenz.	Factories, Station and Barracks.	2,450
13.3.18	Freiburg.	Munition Works and Barracks.	1,984
16.3.18	Zweibrucken.	Barracks, Factories and Station.	1,878
17.3.18	Kaiserslautern.	Barracks and Station.	2,585
18.3.18	Mannheim.	Factories.	2,346
23-24.3.18	Kon7.	Railway Bridge and Works.	1,120
23-24.3.18	Frescaty.	Aerodrome.	3,878
24.3.18	Mannheim.	Factories.	3,083
24-25.3.18	Metz.	Station.	2,230
24-25.3.18	Diedenhofen.	Station.	1,638
24-25.3.18	Metz.	Station.	2,100
24-25.3.18	Cologne.	Station.	1,120
24-25.3.18	Courcelles.	Station.	1,120
24-25.3.18	Luxemburg.	Station.	1,344
27.3.18	Metz-Sablon.	Station.	2,482
28.3.18	Luxemburg.	Station.	2,706
Total for March .....			39,863 lb., or about 17 1/4 tons.

NEW PURSUIT FLIGHTS

Since the first of January, through British and French sources, twenty-two new pursuit flights have been definitely identified, all of which were formed during the past winter, probably in the majority of cases since the 1st January.

The established number of machines has in many cases not been adhered to, the average number of pilots and machines in each flight probably not exceeding twelve.

SUMMARY OF AIR INFORMATION

AIR INTELLIGENCE BULLETIN

NEW IDENTIFICATIONS

(FRENCH AND BRITISH SOURCES).

9th Reconnaissance Flight.....	Lys-Arras region .....	Formerly Verdun.
283rd Art. Ob. Flight.....	Arras-Bapaume region .....	Formerly Russia.
79th Pursuit Flight.....	Peronne-Chauny region .....	First identification.
37th Protective Flight.....	Peronne-Chauny region .....	First identification.
203rd Art. Ob. Flight.....	Peronne-Chauny region .....	Formerly Rheims.
212th Art. Ob. Flight.....	Peronne-Chauny region .....	Formerly Laon.
23rd Reconnaissance Flight.....	Laon region .....	Formerly Peronne-Chauny.
241st Art. Ob. Flight.....	Alsace. ....	Formerly Lorraine.
34th Pursuit Flight.....	Laon region .....	Formerly Peronne-Chauny.
4th Reconnaissance Flight.....	Interior .....	Formerly Russia.

CORRECTION. (R. A. F., 11-4-18).

The identification of the 32nd Reconnaissance Flight in the Verdun region (R. A. F. 1.4.18) is now reported by the French to have been incorrect. This flight is probably still in the Peronne-Chauny region.

AIRDROMES IN ADVANCED AREA

Of the new airdromes confirmed by photograph in the Bapaume-Peronne, Peronne-Chauny regions, ten are in the territory occupied by the Germans since March 20th, and seven are at places where British airdromes had been located prior to that date. Referring to the establishment of forward enemy airdromes, a recent R. A. S. Summary of Air Intelligence states that "in many cases airdromes evacuated by us have been occupied but several new ones have been established in addition".

Eight additional airdromes are reported (seven by air observers and one through another source) in this territory.

Three Protective Flights, three Artillery Observation Flights and one Reconnaissance Flight have been identified in this area.

DISTRIBUTION OF GERMAN AIR FORCES FROM IDENTIFICATIONS OBTAINED TO

APRIL 10th

Region.	Pursuit (18 machines)	Flights by Class.		Observation (6 machines)	Total.
		Bombing (12 machines)	Protective (6 machines)		
Flanders .....	10	6	7	11	34
River Lys-Arras .....	5	3	5	15	28
Arras-Bapaume .....	10	6	3	18	37
Bapaume-Peronne.....	2	..	4	11	17
Peronne-Chauny .....	1	3	3	11	23
Laon .....	11	3	6	20	40
Rheims .....	2	..	..	11	13
Champagne .....	5	..	..	8	13
Verdun .....	2	..	2	12	16
Woevre .....	3	1	2	8	14
Lorraine .....	..	..	..	7	7
Alsace .....	3	..	..	10	13
E. Europe .....	1	..	1	24	26
Asia .....	..	..	..	6	6
Interior .....	..	..	..	1	1
Not located .....	7	2	3	28	40
Total Flights .....	67	24	36	201	328

NOTE.—The normal establishment of machines has not in many cases been adhered to.

## SUMMARY OF AIR INFORMATION

## AIR INTELLIGENCE BULLETIN

## NEW IDENTIFICATIONS

57th Pursuit Flight.....	Lys-Arras region .....	Newly formed unit.
26th Protective Flight.....	Lys-Arras region .....	Formerly Flanders.
232nd Art. Ob. Flight .....	Peronne-Chauny region .....	Formerly Bapaume-Peronne

## AIRDROMES

(CONFIRMED BY PHOTOGRAPH).

Region.	Increase.		Removed.	
	Sheds.	Hangars.	Sheds.	Hangars.
Lys-Arras .....	..	2 (New)	..	4
Peronne-Bapaume .....	..	12 "	..	..

## COMBATS

1st Lieut. Douglas Campbell and 2nd Lieut. Alan F. Winslow, both pilots of No. 94 Squadron, have successfully attacked and brought down within our side of the lines a patrol of two hostile Albatros scouts. The pilots of the hostile machines are prisoners.

## POSSIBLE MOVEMENTS TO THE BATTLE FRONT

(R. A. F., APRIL 12, 1918).

It seems probable that the majority of the German air units in Northern Flanders may have been brought South to the present battle front north of La Bassee.

Two flights formerly in the Therout area have already been identified in the Lille area, and one flight moved recently from Aertrycke to south of Roulers; in addition, enemy activity between Dixmude and the coast is practically nil.

Confirmation is also given by reports received, to the effect that sheds in that area are empty. It is quite probable that this withdrawal may be covered by leaving one or two old machines on the aerodromes.

## GERMAN AIRMEN

The Neuer Goerlitzer Anzeiger, 22nd March 1918, announces that Lieut. von Richthofen has crashed and is wounded; the nature of his injuries is not known. He had recently gained his 29th victory.

NOTE.—Lieut. von Richthofen is a brother of Captain von Richthofen, the leading German airman.

The Kolnische Zeitung of the 22nd March announces that Lieutenant Frank Bethge, commander of a pursuit flight, was killed in an air fight on the 17th March. He had twenty air victims to his credit.

NOTE.—Lieut. Bethge commanded the 30th Pursuit Flight, located near Lens.

Captain von Tutschek, who commanded the 12th Pursuit Flight, and who was reported to have shot down his 26th opponent on the 12th of March, was killed in aerial combat on March 17th.

Captain Buddecke, who had twelve victories to his credit, is announced by German wireless to have been killed on the Western front on the 10th March. This officer was for a long time in service on the Turkish front.

Lieutenant Adam, who commanded the 35th Pursuit Flight—Flanders—and who was credited with 20 Allied machines, is now reported to have been killed in aerial combat 3 months ago.

## AVIATOR'S FIRST AID POUCH

(FRENCH ARMY N. AND N. E. 1-4-18).

Among the accessories found on a hostile airplane was an aviators first aid pouch "Verbrandtasche fur Flugzeuge". It consists of a leather box divided into 3 compartments containing 4 packages of individual dressings, two styptic bands, made with a steel spring, one package of ten bandages of gauze 200 x 20 cms. 2 packages of "Bardella" bandages for burns, 1 roll of zinc plaster and one pair of large scissors for cutting clothes.

## CAMOUFLAGE

In an unconfirmed report obtained through French sources, it is stated that the factory and hangars at the Zeppelin Airship Works (Luftschiffbau Zeppelin) situated about 2 km., north of Friedrichshafen, have not been damaged by the bombardments of the Allied aviators.

When bombed about two months ago, the bombs are said to have fallen on a pseudo factory about 1 1/2 km., north-west of the real factory. False illumination has been established at the location of the dummy factory and as soon as a warning of a raid is received the lights of the town and the factory are extinguished and the false lights turned on.

## RESULTS OF RAIDS

(BRITISH S. OF A. I., APRIL 11, 1918).

Reports received indicate that the damage and loss of life at Mannheim during recent raids were very great, and that ten benzine tanks were destroyed at Ludwigshafen.

NOTE.—Photographs taken during the raid on Mannheim on 24th March, 1918, show two bursts on the petrol depots at Ludwigshafen. A fire was started which was visible to our pilots at Pirmasen (40 miles from Mannheim) on the return journey.

The following information has been received from the French :

A stationmaster visiting Stuttgart on business, who witnessed the air raid of 10th March on this town states that a flight of 10 aeroplanes took part in the raid on the town and its suburbs. Considerable damage was done. The Deimlingworke Factory (?Daimler Works) for aeroplane engines was hit and seriously damaged. An erecting workshop was burnt and three others partially destroyed. Ten people were killed and 42 wounded. A bomb damaged a yard in the neighborhood of Boblingen ; several casks of benzine caught fire.

At Sindelfingen a munition factory was hit by bombs. There was a loud explosion and a large fire broke out. There were some killed and wounded, but the informant was not able to learn how many.

On the return journey one of the aeroplanes was obliged to land near the Black Forest. The two airmen—two Englishmen—were taken prisoners. They are not wounded.

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# SUMMARY OF AIR INFORMATION

## AIR INTELLIGENCE BULLETIN

### IDENTIFICATIONS

(BRITISH S. A. I., APRIL 14, 1918).

249th Art. Ob. Flight ..... Laon region ..... Formerly Alsace.

### AIRDROMES

(CONFIRMED BY PHOTOGRAPH).

Region.	Increase.		Removed.	
	Sheds.	Hangars.	Sheds.	Hangars.
Lys-Arras .....	6	..	..	11
Arras-Bapaume .....	2	..	..	12
Bapaume-Peronne.....	..	46	1	50
Peronne-Chaunoy.....	..	4	..	..
Verdun.....	..	7	9 Tents	..

### CASUALTIES AND DIFFICULTIES IN REPLACEMENT OF PERSONNEL AND MACHINES

(R. A. F. APRIL 12, 1918).

A prisoner of the 205th Art. Ob. Flight recently taken by the British, whose flight was identified near Lille on the 9th April, states that his flight was to have been equipped with 9 machines when it arrived in this area, prior to the offensive. The strength of the unit, has not, so far exceeded 8 two-seaters.

This flight lost five machines (all shot down in aerial combat) between the 21st and 28th March. It took nine days to replace these casualties from the 17th Army Aircraft Park (Grandglise).

The prisoner also stated that there was a shortage of flying personnel, as well as of machines, in this army (VIth). The prisoner (pilot) is a Bavarian and he points out that only because of this shortage was he attached to the Prussian unit. (Bavarians are now never transferred permanently to non-Bavarian units, but in cases of emergency may be attached.)

On the other hand, a prisoner of the 48th (Bavarian Reconnaissance Flight) has stated that there was no shortage of pilots.

It would, however, appear possible that the formation of a number of new units and in the increase in establishment of Reconnaissance and Art. Ob. Flights has compelled a reduction temporarily at any rate, both of pilots and machines in Pursuit units. Deficiency in machines has in some cases apparently been made good by the employment of older type scouts, for example, the 86th Pursuit Flight (in the same area) is equipped throughout with Albatros D-3 machines.

Various statements from prisoners recently captured show that the establishment of Reconnaissance units is being raised from 6 to 9 machines.

An officer pilot recently captured by the French, states that there is a shortage of pilots in the German Air Service; the prisoner believes that this is due to shortage of machines in training squadrons in Germany; that the wastage of pilots at the front is very considerable; to replace this wastage pilots are turned out too quickly at training establishments with the result that many casualties occur owing to lack of experience.

### GERMAN MACHINES, HANNOVERANER TWO-SEATER

(R. A. F. APRIL 14, 1918).

A machine of this type was brought down near Lestrem on the 26th March. It was fitted with a 180 H. P., 6 cylinder Opel Argus engine.

Span .....	48'	3'
Chord of top plane .....	5'	11'
Gap .....	5'	3"
Corrall length.....	25'	6 1/2"

Ailerons are fitted to the top plane only, these being balanced; the chord of the top plane is slightly greater than that of the bottom. There are only one pair of interplane struts on each wing, these being slightly staggered outwards.

Special note. It is constructed with a double tail plane, the second one been mounted at the top of the rudder; there is one small strut on either side between the planes.

Elevators are fitted to each plane, but are not balanced, the bottom one being cut away in the center, as in a Rumpler, to take the rudder.

Armament. One '08 pattern machine gun (Spandau) firing through the propeller; and one parabellum gun mounted on a turret round the observer's cockpit.

The workmanship and finish of the machine are described as very good.

### DIRIGIBLE BALLOONS

(FRENCH G. Q. G. APRIL 1, 1918).

Crew of a Zeppelin:

- 1 Captain-Lieutenant as Commander (Schiffsfuhrer).
- 1 First Lieutenant as 2nd Officer.
- 1 First Hemelsman or Steerman (Pilot),
- 1 First Engineer or Machinist.

- Chief Boatswain's mates (Sergeants). Side Steering wheel.  
 2 Signal mates (Non-commissioned). Elevation steering wheel.  
 2 Radio telegraphist mates (Non-commissioned). For wireless telegraphy.  
 8 Machinists mates (Non-commissioned) or First Mates for the 4 motors.  
 2 Sail makers (men in charge of the small balloons).  
 1 Man for the machine-gun in the rear car.  
 9 Men in reserve, all non-commissioned.

Total 30

The chief boatswain's mates alternate in doing two hour watches at the steering wheel and two hour's watch at the machine guns on the platform. The Signal mates alternately do 2 hours watch at the steering wheel and 2 hours at the machine gun in the forward car.

Equipment of a Zeppelin :

- 3 Machine guns on the platform.  
 1 Machine gun in the forward car.  
 1 Machine gun in the rear area.

Attempts are said to have been made to equip the dirigibles with light cannon, but the results were not favorable. The stability of the dirigible is said to be affected by the use of a cannon.

The figures given above, both as regards the crew and the equipment, do not apply to dirigibles in general, but, if exact, must refer to new dirigibles of large type. The Zeppelin shot down at Bourbonne in October, 1917 had 23 men on board and one machine gun.

#### THE INFANTRY AIRPLANE

(FRENCH G. O. G. APRIL 15, 1918).

(TRANSLATION OF A GERMAN DOCUMENT).

"The German infantry airplane has two streamers on the lower plane.

#### IT WILL AID YOU

Notify it of your presence by spreading out pieces of cloth (panels) and newspapers. The pieces of cloth are to be placed exactly in squares, for if this is not done, the airplane cannot identify them.

Spread out as much as possible several pieces of cloth or several newspapers side by side.

Fire white luminous cartridges in the trench, and *not* upward, or else set fire to the illuminating matter of the signalling cartridges, either in the trench or on the parapet.

Walk in the trench, and make signals by means of looking glasses or other shining things".

#### NEW METHODS OF COMMUNICATION USED BY THE ENEMY

(FRENCH G. O. G. BUL. APRIL 15, 1918).

The German Regulations of January 22, 1918, on methods of communication were recently captured. They contain the following sentence :

"All means of communication are exposed to the danger of being intercepted by the enemy (Wireless telegraphy, ground telegraphy, carrier pigeons, dogs). Only the "UTEL" has appeared to afford relative security against interception".

The term "UTEL" appears for the first time ; it is possibly an abbreviation of two words of which the first begins with the letter "U" and the second is the word "Telephone" (U-Tel). Several reports indicate that the Germans have been working on the construction of a telephone, conversation over which cannot be overheard. It is possible that this method has actually been perfected and given the name of "UTEL".

The attention of Intelligence Officers is drawn to the importance of ascertaining the meaning of the term.

# SUMMARY OF AIR INFORMATION

## AIR INTELLIGENCE BULLETIN

### NEW IDENTIFICATIONS

24th Pursuit Flight ..... Peronne-Chauny region ..... Formerly Arras-Bapaume.

### AIRDROMES

Region	Increase.		Removed.	
	Sheds.	Hangars.	Sheds.	Hangars.
Flanders .....	12	..	11	22
Arras-Bapaume.....	..	5	..	4
Bapaume-Peronne .....	..	31	..	5
Peronne-Chauny.....	..	23	..	..

### NAVAL DIRIGIBLES

(FRENCH B. R. A. APRIL 1, 1918).

There is in the German Navy an Aircraft Section (Luftschiffabteilung), divided into 5 Airship Groups (Luftschifftrupp). This section is commanded by Naval Captain Strasser, with First Lieutenant Wendt as assistant officer. Headquarters are at Nordholz.

The following Groups compose the Section :

Nordholz.  
Thlhons.  
Wittmundhafen.  
Seddin, near Stelp.

Nordholz Group :

Officers.—Lieutenant. Commander (Kapitän Lieutenant) Reimers  
Dirigibles.—L. 13, L. 14 for training purposes (Schulschiffe).  
L. 27, L. 29, (Zeppelins 180 m. in length).  
1 or two Zeppelins of 230 metres.

Tondern Group :

Officers.—Lieutenant. Commander Martin (brother of a Zeppelin commander who is a prisoner in England).  
Dirigibles.—The L 17 and L 22 which have been destroyed belonged to this group.

Ahlhorn Group :

Officer.—Lieutenant. Commander Zunt.

Wittmundhaf on Group : (Formerly had its base at Hage).

Officers.—Lieutenant. Commander Spim.  
Dirigibles.—L 56 (Captain Menge) L 59 (Captain Friemol). Of the same type as the L 49 captured in France during a raid in the latter part of 1917; having a length of 230 metres, a diameter of 18 metres and a capacity of 5400 mc.

The Supply Park for this Group is located between Heglitz and Osterloog. The Park Personnel (called Transport Personnel) is as follows :

- 1 Lieut. Commander commanding.
- 2 Group Officer transportation Sergeant Majors (Et. majors, Feldwebel).
- 8 Vice Sergeant Majors.
- 1 Paymaster.
- 1 Chief Engineer.
- 1 Engineer.
- 1 Doctor.
- 40 Sub officers.
- 603 Men.... Total 655.

Most of the men belong to the old class of the Navy and partly to the other class of men suitable for garrison duty and as laborers.



# SUMMARY OF AIR INFORMATION

## AIR INTELLIGENCE BULLETIN

### NEW IDENTIFICATIONS

29th Reconnaissance Flight .....	Peronne-Chaunay region .....	Formerly Lys-Arras.
14th Reconnaissance Flight .....	Verdun region .....	Lotely unlocated.
64th Pursuit Flight .....	Woevre region .....	Formerly Verdun.
43rd Pursuit Flight .....	Woevre region .....	Formerly unlocated.

### 64th PURSUIT FLIGHT

A prisoner recently brought down near Toul has made the following statement regarding the composition, duties and equipment of this flight, and the hostile air forces in the region of the Woevre.

**LOCATION.** When the prisoner joined this flight in February it occupied the aviation field at Mercy-le-Haut, and was at that time attached to the 5th German Army. About the 1st March it relieved the 42nd Pursuit Flight at Mars-la-Tour, the latter having probably left for the Somme region. At present he 64th Flight is attached to the German Army "C".

**SECTOR.** Its present zone of operations extends from Etain to Pont-a-Mousson (Woevre region).

**MISSION.** Its work is limited to the performance of pursuit duties ; up to the present time it has not any victories to its credit. (Three machines of this flight have now been brought down on the Allied side of the line.)

**PERSONNEL AND EQUIPMENT.** Lieutenant Hanke is the commanding officer ; and there are six pilots in the flight.

It possesses 13 or 14 machines of the "Albatros D-5" type and Pfalz. The Albatros D-5 is very much liked by the German aviators ; although the Pfalz is probably faster and can rise with greater speed, it is not in favor because its maneuvering qualities are not so good.

**OTHER FLIGHTS.** The 205th Art. Ob. Flight, until recently stationed at Joppecourt, has left for the Somme region.

**NOTE.**—The 205th Art. Ob. Flight was identified by the British on 9th April (through a prisoner's statement) at the Chauteau-du-Bart airdrome, north of Lille.

There were only a few aviators at the Frescaty on the 10th of April, the bombing flights having left in March ; the hangars appear to be empty.

**AN ARMY MOSAIC SECTION.** (Rhinhabildabteilung) composed of 3 D. F. W. and Rumpler machines, has reported at Mars-la-Tour.

**AVIATION FIELDS.** In addition to the fields at Mars-la-Tour, Frescaty, Mercy-le-Haut and Joppecourt, the prisoner is familiar with the fields at Puxieny and Marimbois, in this region.

The Aviation Park of the German Army "C" is located at Frescaty. (Confirmation is desired).

**NOTE.**—The above statement confirms generally the information recently given by another prisoner of the 64th Flight. See Air Intelligence Bulletin, April 2nd.

### EMPLOYEMENT OF RECONNAISSANCE AND ARTILLERY FLIGHTS

FROM BRITISH SUMMARY OF AIR INTELLIGENCE APRIL 17, 1918.

Translation of German Divisional Order for Air Reconnaissance.

4th ERSATZ DIVISION.

I. a. No. 34—SECRET.

DIV. HQ., APRIL 6, 1918.

The 294th (Bav.) "A" Flight is Allotted to the Division for "Georgette" (attack 9 April, 1918). Aerodrome Tourmignies. The flight also works for the 207th Division.

On the day of attack, this unit will take over reconnaissance duties within the divisional battle sector.

Machines will be placed at the disposal of Artillery Commander 139 on demand the task of the machines will be to check the fall of the rounds and to engage fleeting targets, as they appear, with batteries detailed for this purpose.

An Infantry (contact patrol) Aeroplane will always be standing by at Tourmignies aerodrome.

The Divisional Signal Commander will maintain direct communication between Divisional Battle Headquarters and the 294th (Bav.) "A" Flight.

Personnel and material will be provided at the Advanced Landing Ground At Provin on "X" day by the 294th "A" Flight. The Division will detail a staff car to be at this advanced landing ground from dawn on "X" day. (The Camp Commandant Divisional Headquarters, will arrange). This motor car is at the disposal of observers who have landed at Provin, in order to proceed to Divisional Battle Headquarters (Berelau Cemetery) and to return to their advanced landing ground.

The Report Centre For Messages Dropped From Aeroplane will be at Divisional Battle Headquarters (Berelau Cemetery) from dawn on "X" day. (The Divisional Signal Commander will arrange.)

The Battle Aviation Ground Wireless Station will receive at Berelau from dawn on "X" day. (The Divisional Signal Commander will arrange.)

Contact Patrol Machines will fly with a streamer on the left hand plane. They will ask for ground signals from the infantry in the Foremost Line by firing white star lights. These ground signals may only be laid out by the infantry in the foremost line and will be carried forward as the attack progresses.

Another method of showing the position to the contact patrol airmen is to fire white Very lights into the ground. Twenty men in each company will be provided with Very lights.

The Staffs of battalions and of the higher formations must lay out the signals (given on page 11 of the "code-book") at their battle headquarters as soon as the contact patrol machine appears.

The airman's "Understood" signal will be one white light ball which breaks into two balls.

Corps (Group) Headquarters are detailing Battle Flights for low flying. Times have not yet been fixed.

Low-Flying Enemy Machines are to be engaged from the ground, even during the attack. An aeroplane will only be fired on when it has been unmistakably recognized as being hostile.

Artillery Commander 139 will arrange to protect battery and limber positions with the machine guns of the artillery.

The 311th Balloon Section is also under the orders of Artillery Commander 139.

(Signed) VON BRONSART.

Distribution :

As Divisional orders.

In addition :

294th (Bav.) "A" Flight—6 copies.

311th Balloon Section—I copy.

(Endorsement By Brigade.)

13TH ERSATZ INFANTRY BRIGADE.  
BOOK NO. I. 126-SECRET.

7-APRIL-18.

To the 360th Infantry Regiment.

Attention is once more to be drawn to the importance of communication between infantry and contact patrol machines. Special note is to be made that only the infantry in the foremost line is to lay out ground signals, which are to be carried forward at each advance.

The engagement of low-flying airmen will be the task of machine guns.

As regards aerial protection during the assembly, reference should be made to Brigade Order of 6-April-18, I, No. 124.—Secret.

(Signed) VON SOBBE.

NOTE.—Several points of interest should be noted in the above order ;

(1) For the purpose of an attack observation flight is allotted to an attacking division.

This tends to confirm the inference heretofore drawn from captured documents (See Air Intelligence Bulletin April 2nd) that the Germans in the present offensive are adopting the principle of attacking a flight to each division engaged in the attack.

(2). The duties of the flight include reconnaissance, contact patrol and artillery regulation.

(3). Battle flights, that is, low flying protective aeroplane, in co-operation with the infantry in the attack, are under the orders of the Corps (Group).

(4). The methods provided to secure the communication of reports :

(a) Advanced Landing Ground for observers.

(b) Report Centre at Divisional Battle Headquarters for messages dropped.

(c) Battle Aviation Ground Wireless Station.

(5). The provision in the order that "low flying enemy machines are to be engaged from the ground, even during the attack".

# SUMMARY OF AIR INFORMATION

## AIR INTELLIGENCE BULLETIN

SUMMARY FOR THE PERIOD 11TH TO 17TH APRIL, INCL.

### NEW IDENTIFICATIONS

(Regions corresponding to those occupied by German Armies).

Flights.	In Region of	From Region of
1 Pursuit .....	River Lys to Arras .....	Newly formed unit.
1 Protective .....	River Lys to Arras .....	Flanders.
1 Observation .....	River Lys to Arras .....	Verdun.
1 Observation .....	Arras-Bapaume .....	Eastern Front.
2 Pursuit .....	Peronne-Chauny .....	Arras-Bapaume (1) New unit (1).
1 Protective .....	Peronne-Chauny .....	New unit.
4 Observation .....	Peronne-Chauny .....	Rheims (1), Laon (1), Bapaume-Peronne (1), Lys-Arras (1).
1 Pursuit .....	Laon .....	Peronne-Chauny.
2 Observation .....	Laon .....	Peronne-Chauny (1), Alsace (1).
1 Observation .....	Verdun .....	Lately unlocated.
2 Pursuit .....	Woevre .....	Verdun (1), Formerly unlocated (1).
1 Observation .....	Alsace .....	Lorraine.
1 Observation .....	Interior .....	Eastern Front.

### AIRDROMES

(a) Confirmed by photograph.

Region	Increase		Removed	
	Sheds	Hangars	Sheds	Hangars
Flanders .....	12	..	11	22
Lys-Arras .....	6	2	..	15
Arras-Bapaume .....	2	5	..	16
Bapaume-Peronne .....	..	89	1	55
Peronne-Chauny .....	..	27	..	..
Verdun .....	..	7	9 Tents	..
Total .....	20	130	21	108

NOTE.—In some cases changes reported in accommodation in a particular region indicate only a change in location of airdrome accommodation already existing in that region. For example, in the Arras-Bapaume and the Bapaume-Chauny regions reports of the establishment of advanced airdromes have often been accompanied by reports of decrease in accommodation in that part of region back of the former battle line.

(b) Reported but requiring confirmation by photgraph.

Region	No. of Airdromes.	Source.
Flanders .....	4	Agent.
Arras-Bapaume .....	1	Agent.
Bapaume-Peronne .....	1	Observation.
Peronne-Chauny .....	8	Observation (6) Prisoner (1), Agent (1):
Laon .....	1	Agent.

### DISTRIBUTION OF GERMAN AIR FORCES IDENTIFIED TO APRIL 17th, INCL.

Region	Flights by Class.				Total
	Pursuit (18 machines)	Bombing (12 machines)	Protective (6 machines)	Observation (6 machines)	
Flanders .....	10	6	6	11	33
River Lys-Arras .....	6	3	6	15	30
Arras-Bapaume .....	9	6	3	19	37
Bapaume-Peronne .....	2	..	4	10	16
Peronne-Chauny .....	7	3	4	15	29
Laon .....	12	3	6	21	42
Rheims .....	2	..	..	10	12
Champagne .....	5	..	..	7	12
Verdun .....	1	..	2	12	15
Woevre .....	5	1	2	8	16
Lorraine .....	..	..	..	6	6
Alsace .....	3	..	..	10	13
E. Europe .....	1	..	1	25	27
Asia .....	..	..	..	6	6
Interior .....	..	..	..	2	2
Not located .....	6	2	3	24	35
Total Flights .....	69	24	37	201	331

NOTE.—The increase of 3 in total number of flights reported since April 10th (Bulletin April 12th) is accounted for by the identification of the 57th Pursuit Flight, 79th (Bav.) Pursuit Flight, and the 37th Protective Flight, new formations not previously identified.

### IDENTIFICATIONS IN FORWARD AREA

3 Pursuit Flights, 3 Protective Flights, 2 Reconnaissance Flights and 4 Artillery Observation Flights have now been identified in the area occupied by the Germans since March 20th (Bapaume-Peronne, Peronne-Chauny regions). Eighteen airdromes have been confirmed by photograph in this area; and eight additional airdromes are reported (7 by observation and 1 through a prisoner's statement).

**RESULTS OF BOMBING**

(EXTRACTS FROM LETTERS TAKEN FROM PRISONERS CAPTURED BY FRENCH).

Treves, Feb. 21.

"... Here the aviators keep us continually apprehensive... This week has been terrible, we passed the afternoon and the evening in the cellar... They have a grudge against our corner ; the house situated near the Court House (Bohmerstz) opposite us was half blown up by a bomb, and the other half burned... They threw incendiary bombs and gas bombs. We had been happy in the thought that our system of defense would prevent them from further trips to our city, but this week has proved quite the contrary... Those brigands fly very low, almost scraping the house roofs, and they even fired their machine guns... If this goes on, there will be no further safety in the cellar..."

Mayence, March 12.

"... Saturday at 1:30 p. m. 9 aviators came to Mayence and throw 16 bombs. 8 people are said to have been killed, and two houses are reported damaged... These bombs were certainly intended for the munitions plant and the bridge over the Rhine."

# SUMMARY OF AIR INFORMATION

## AIR INTELLIGENCE BULLETIN

### NEW IDENTIFICATIONS

7th Reconnaissance Flight .....	Lys-Arras region.....	Formerly in Flanders.
19th Pursuit Flight .....	Arras-Bapaume region .....	Formerly Rheims region.
1st Pursuit Flight School.....	Arras-Bapaume region .....	Previously unidentified.
69th Pursuit Flight .....	Peronne-Chauny region .....	Newly formed unit.
32nd Pursuit Flight.....	Peronne-Chauny region .....	Formerly in Champagne.
2nd Protective Flight.....	Peronne-Chauny region .....	Formerly in Flanders.
206th Art. Ob. Flight .....	Peronne-Chauny region .....	Formerly in Rheims region.
235th Art. Ob. Flight .....	Peronne-Chauny region .....	Formerly Lys-Arras region.
249th Art. Ob. Flight .....	Peronne-Chauny region .....	Formerly Laon region.
21st Reconnaissance Flight .....	Peronne-Chauny region .....	Formerly on Eastern Front.
74th Pursuit Flight .....	Rheims region .....	Newly formed unit.

### AIRDROMES

(CONFIRMED BY PHOTOGRAPH).

Region.	Increase		Removed.	
	Sheds	Hangars	Sheds	Hangars
Peronne-Chauny .....	42 Tents	103	..	..

### DEATH OF CAPTAIN VON RICHTHOFEN

An official report from the British, issued late in the evening of the 21st April announces the death of Captain Richthofen as follows :

"Rittmeister Freiherr von Richthofen was brought down and killed today north of the Somme".

NOTE :—This report is further officially confirmed today. The official German Communique of the same date (issued at 2:15 p. m., intercepted by wireless) had previously announced, that "Captain von Richthofen, at the head of his veteran Pursuit Flight No. 11, achieved his 79th and 80th victories".

Lieut. von Richthofen, a brother of Captain von Richthofen, who was wounded in March, is reported to have been slightly wounded again the 14th or 15th April

### NEW COMBAT RECORD

(R. A. F. COMMUNIQUE 132).

The following are reports of combats by Captain J. L. Trollope, No. 43 Squadron, who accounted for six enemy aircraft in one day, thus establishing a new record :

"Whilst leading my patrol east of Morcatel, I saw three D. F. W.'s some way trying to cross the line. I worked round east and attacked one but was forced by my gun jams to break off. I corrected my guns and then attacked another D. F. W. I fired about 100 rounds at point blank range. E. A. went down in a spin and broke up about 1,000 foot below me. This was seen by Lieut. Owen.

"I then attacked another D. F. W. with Lieut. Owen and after firing 75 rounds the machine burst into flames and fluttered down on fire. This was confirmed by Lieut. Owen, who also engaged it.

"I then saw an Albatros Scout coming down on to one of our formations. I dived on him and fired about 100 rounds. E. A. fell completely out of control. This was seen to crash by Capt. Woollott."

"When I was leading my patrol over Sailly Saillisel at about 6,000 foot, I saw four E. A. two-seaters trying to interfere with R. E. 8's. I dived down with my formation and attacked an E. A. I fired a short burst at close range and the enemy machine fell to bits in the air. I saw two of my patrol engaging the other three two-seaters at close range and I saw two E. A. go down completely out of control and crash. I gathered all my patrol and flew about looking for the other E. A.

"I saw two pink two-seaters below me very close to the ground ; I attacked each in turn from about 20 foot and they nose-dived into the ground and I saw both crash. I climbed up and saw the rest of my patrol engaged by a large formation of E. A. scouts. I got into the scrap and was forced to return through lack of ammunition."

# SUMMARY OF AIR INFORMATION

## AIR INTELLIGENCE BULLETIN

### NEW IDENTIFICATIONS

(FRENCH SOURCE).

33rd Pursuit Flight .....	Lys-Arras region.....	Formerly in Flanders.
8th Reconnaissance Flight .....	Lys-Arras region.....	Formerly in Flanders.
1st Pursuit Flight .....	Arras-Bapaume region .....	Formerly in Laon region.
22nd Protective Flight.....	Peronne-Chauny region .....	Formerly in Laon region.
239th Art. Ob. Flight.....	Peronne-Chauny region .....	Formerly in Laon region.
60th Pursuit Flight .....	Laon region. ....	Lately unlocated.
61st Pursuit Flight .....	Laon region .....	Newly formed unit.
39th Reconnaissance Flight .....	Laon region .....	Lately unlocated.
208th Art. Ob. Flight .....	Laon region .....	Formerly Eastern Front.
249th Art. Ob. Flight .....	Laon region .....	Formerly Peronne-Chauny.
9th Bombing Flight.....	Champagne.....	Lately unlocated.

### EQUIPMENT AND DUTIES OF UNITS

From the statements of recently captured German prisoners the 282nd Art. Ob. Flight (Alsace region) is equipped with 6 two-seaters machines (4 of them D. F. W. type) ; its duties are reconnaissance and photography.

### MOVEMENTS OF UNITS

(R. A. F. 20-4-18).

A prisoner captured on the 27th March states that the bombing flights at Frescaty airdrome, Metz, namely, Nos. 7, 8 and 9 (6th Bombing Squadron) left there about the 25th March, probably going to Cambrai. On the other hand, according to previously captured prisoners the 8th Bombing Flight had only two weeks before left Laon for Metz.

A prisoner captured on April 14th states there were only a few aviators at the Frescaty airdrome, the bombing flights having left in March, and that the hangars appeared to be empty (A. I. Bulletin No. 2).

The 9th Flight has been identified by the French at Malmy, near Sedan (Champagne region), III Army (B. R. Armees N. and N. E. 21-4-18).

Further confirmation of the movement of the 7th and 8th flights is required.

### GERMAN MACHINES

(PRISONER'S STATEMENTS, SUMMARY R. A. F.)

**FOKKER TRIPLANE.** The latest type Fokker Triplane is fitted with a 160 H. P. Siemens-Schuckert engine ; the machine is otherwise the same as the one which was formerly fitted with the 110 H. P. Oberursel engine.

**FOKKER BIPLANE.** The Fokker Biplane scout previously reported to be fitted with a high-compression 160 H. P. Mercedes engine) is now stated to have a 160 H. P. Siemens-Schuckert rotary engine ; it is being used to a small extent at the front at present and is an entirely new machine. It has small extensions on the top planes, with a slight washout. There is one pair of vertical interplane struts on either side of the fuselage. This machine is stated to have given great satisfaction.

Information has been received from the French that this machine is fitted with 3 machine guns, two of which fire through the propeller.

**PFALZ SCOUT.** A new type of Pfalz Scout is said to be making its appearance on the front in small numbers ; this machine is said to have swept back wings, but no further description could be obtained.

**HANNOVERANER** two-seater is extremely unpopular ; the engine is said to be unreliable. This machine is said to have a slight backward stagger.

### ARMY AIRCRAFT PARKS

(R. A. F. 21-4-18).

A recently captured mechanic states that army aircraft parks generally detach an advanced stores depot (Parkstaffel) where spare propellers, a certain amount of rigging material and engine spares are kept.

In the case of the Eighteenth Army, the Parkstaffel, when the park was at Berlaimont, was located at Guise ; on the latter moving to Guise, the advanced depot went forward to Ham.

### DURATION OF FLIGHT TO COLOGNE

The R. A. F. Communique of 10th April states that during the night of 24th/25th March, one Handley Page of Naval Squadron No. 16, carried out the first raid on Cologne, the railway station being the objective. Ten 112-lb. bombs were dropped, causing a fire near the station. The machine was in the air 8 hours 35 minutes.

### BOMBING UNITS, POLICY

(R. A. F. 20-4-18).

According to a recently captured pilot, air raids against London have temporarily suspended on the grounds that the results obtained were out of proportion to the losses incurred during the raids and the number of casualties sustained when landing on return.

NOTE :—Several machines of the 3rd Bombing Squadron have lately been shot down while on bomb raids over the back areas in France, which would now appear to be the chief zone of activity of this squadron; formerly this Squadron was specially detailed to bomb England only. Further, 2 Giant machines flew over the lines in the Soissons-Compiègne area on the night of the 12th, 13th April last.

#### GERMAN AIRMEN

(R. A. F. SUMMARY).

Rittmeister von Zebel commands the 29th Reconnaissance Flight.

Lieut. Bengartz was killed in aerial combat about 10 days ago. He commanded the 19th Pursuit Flight and was reputed to have shot down 33 enemy machines.

Lieut. Gotsch (reputed to have shot down 17 machines) was killed carrying-out low flying south of the Somme.

Lieut. Hess, who was credited with 17 air victories, was killed in January last.

Lieut. Geigel, reputed to have shot down 15 machines, has been killed.

#### RESULTS OF RAIDS

(BRITISH SUMMARY OF A. I.).

(a) The following is an extract from a captured letter, dated Mannheim, 24th March 1918: "One of the recent raids had disastrous results. The Lanz Works and a Match factory were hit."

(b) A captured letter, dated 26th February, 1918, contains the following passage: "The aviators have again been to Metz. A lot of damage was done and the station was hit. It has not been mentioned in the papers."

(c) The following information was given by a prisoner of war: During the raid on Frascaty on the night of 23rd-24th March, 1918, 17 machines were damaged and a hangar was completely destroyed.

#### POLICY WITH REGARD TO PRISONERS OF WAR IN RAIDED AREAS

The following is extracted from a German paper:

"The Mayor of Mainz has requested the Minister of War to place French and English officers in the prisoner of war camp in the town, with the object of preventing enemy air raids. As the municipality of Franckfort and the General commanding the district have supported this request, the mayor hopes to receive a favourable reply at an early date."

# SUMMARY OF AIR INFORMATION

## AIR INTELLIGENCE BULLETIN

### NEW IDENTIFICATIONS

266th Art. Ob. Flight .....	Lys-Arras region.....	Formerly Arras-Bapaume region.
34th Reconnaissance Flight .....	Peronne-Chauny region .....	Formerly Italy.
40th Reconnaissance Flight .....	Peronne-Chauny region .....	Formerly Woevre region.
234th Art. Ob. Flight .....	Laon region .....	Formerly Rheims region.
254th Art. Ob. Flight .....	Laon region .....	Formerly Verdun region.
277th Art. Ob. Flight .....	Laon region .....	Formerly Bapaume-Peronne region.

### AIRDROMES

(CONFIRMED BY PHOTOGRAPH).

Region.	Increase.		Removed.	
	Sheds.	Hangars.	Sheds.	Hangars.
Lys-Arras .....	10	3	..	..
Peronne-Chauny .....	18	76	..	7
Laon .....	..	7	..	..

### PROTECTION REQUESTED FOR RECONNAISSANCE FLIGHTS

(R. A. F. 22-4-18.)

A translation of a document dated 26th March, captured on 21st April, is given below. It is a request from a Group Commander of Aviation (corresponding to the British Corps Wing Commander) to the 1st Pursuit Squadron (a group of 5 Pursuit Flights) for action by scouts, in order to enable German reconnaissance to cross the lines.

26th March, 9.40 a. m.

Group Commander of Aviation No. 12 (Gruff) to 1st Pursuit Squadron.

Airman reports that it is not possible to fly over the Ancre in a westerly direction on account of strong enemy positions.

I request that this aerial barrage be forced back, in order that a reconnaissance up to the line Marieux-Puchevillers may be carried out.

Signature.

Group Commander of Aviation No. 12.

NOTE.—In the German Air Service, one of the flights working for a Group (Corps) is detailed for long distance photographic and reconnaissance work. The line Marieux-Puchevillers is ten miles inside the British lines (Bapaume-Peronne region). Capt. von Richtofen commanded the 1st Pursuit Squadron.

### RITTMESTER FREIHERR VON RICHTHOFEN

(Note published in R. A. F. Summary of Air Intelligence, 22nd April, 1918).

Rittmeister Freiherr von Richthofen, credited with 80 air victories up to the 20th April, was shot down and killed in our lines near Corbie on the 21st April; he was flying a Fokker triplane painted red.

Richthofen began his military career in the 1st Ulanen Regiment, with which he remained till May 1915, when he joined the Flying Corps as an observer. After training at Cologne and Grossenhain, he joined the 69th Reconnaissance Flight on the Russian Front, where he remained till August 1915, he then transferred to a bombing unit, then at Ostend, and later in Champagne, where he shot down his first enemy machine as an observer in a two-seater.

Richthofen then trained as a pilot at Deberitz (November, 1915) and joined the 2nd Battle Squadron (two-seater fighters), then at Metz (March 1916), and later went to Russia with this unit.

In August 1916, Boelcke, on a visit in Russia, recruited Richthofen for his Jagdstaffel (pursuit flight), then in course of formation; this unit equipped with Fokker monoplanes, started flying on the 17th September on the Somme battle front.

In December, 1916, after his 16th air victory, Richthofen was given command of the 11th Pursuit Flight, and decorated with the order Pour le Merite. With his flight he was on the Arras front (Douai aerodrome) in April, 1917.

Later, he flew in Flanders (Marcke aerodrome) and was wounded in the head over Wervicq on the 7th July; he had then been credited with 57 air victories.

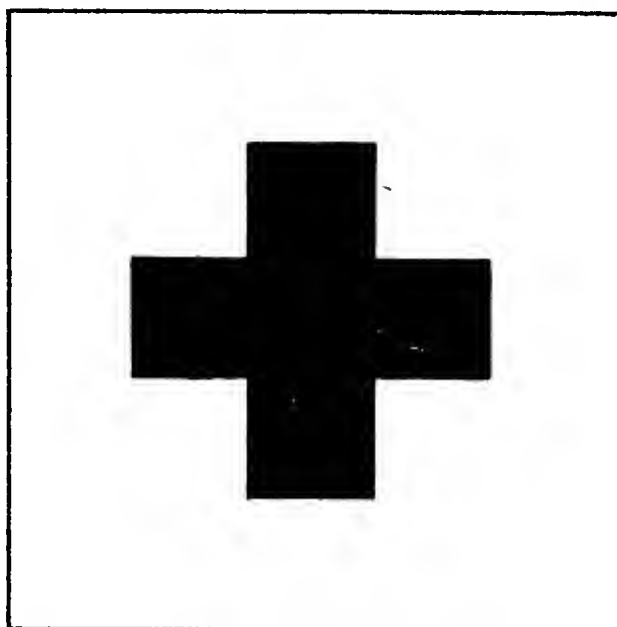
In October, 1917, he was given command of a pursuit squadron (consisting of four flights) and moved to Avesnes-le-Sec aerodrome at the end of November.

His squadron was afterwards numbered the 1st, and comprised five pursuit flights.

Richthofen was regarded as Germany's greatest airman, and his name was used to inspire confidence whenever the feeling between the German Flying Service and other arms became acute. An account of his experiences, written by himself, was published and distributed as propaganda amongst all services of the German Army and also given a wide circulation in neutral countries.



NEW MARKING ON GERMAN MACHINES.



THE ABOVE SKETCH SHOWS A NEW MARKING FOUND ON A MACHINE RECENTLY CAPTURED BY THE BRITISH. THE CROSS IS BLACK ON A WHITE SQUARE. THE OLD TYPE OF MARKING (MALTESE CROSS) HAD BEEN PAINTED OVER AND REPLACED BY THE ABOVE.



# SUMMARY OF AIR INFORMATION

## AIR INTELLIGENCE BULLETIN

### NEW IDENTIFICATIONS

78th Pursuit Flight. ....	Flanders.....	Formerly Woevre region.
43rd Pursuit Flight. ....	Lys-Arras region.....	Formerly Woevre region.
19th Reconnaissance Flight. ....	Lys-Arras region.....	Formerly in Italy.
11th Pursuit Flight. ....	Bapaume-Peronne region .....	Formerly Arras-Bapaume region.
219th Art. Ob. Flight .....	Bapaume-Peronne region .....	Formerly in Italy.
60th Pursuit Flight .....	Peronne-Chauny region. ....	Formerly Laon region.
30th Protective Flight.....	Peronne-Chauny region. ....	Formerly Flanders.
34th Protective Flight.....	Peronne-Chauny region. ....	Formerly Laon region.
236th Art. Ob. Flight.....	Peronne-Chauny region. ....	Formerly Verdun region.
251st Art. Ob. Flight.....	Peronne-Chauny region. ....	Formerly Lys-Arras region.
254th Art. Ob. Flight.....	Peronne-Chauny region. ....	Formerly in Laon region.
000th Pursuit Flight. ....	Verdun region. ....	Lately unlocated.
272nd Art. Ob. Flight.....	Verdun region .....	Formerly Rheims region.

### AIRDROMES

(CONFIRMED BY PHOTOGRAPH).

Region.	Increase.		Removed.	
	Sheds.	Hangars.	Sheds.	Hangars.
Flanders .....	..	1	..	1
Lys-Arras .....	..	7	..	..
Arras-Bapaume .....	4	..	..	4
Bapaume-Peronne.....	..	..	..	5
Peronne-Chauny.....	..	39	..	..

### INFANTRY AIRPLANES

The following extracts from a captured German order, dated 16th March and emanating from a unit in the 236th Division ; published in the R. A. F. Summary of Intelligence, Serial No. 64, deal with the action of enemy airplanes, and are of interest as showing the results the Germans hoped to obtain from the employment of their air forces :

"Battle aeroplanes (Schlachtenflieger) will appear on the commencement of the attack and support our infantry from a low height by machine gun fire, bombs and hand grenades, making repeated flights.

"Scouts (Jadgflieger) are allotted the task of driving the enemy aeroplanes from the battle field.

"On the day of the attack, strong reinforcements of aircraft units will probably give us air superiority, so that enemy machines need not be feared ; ground signals can therefore be laid out without danger. This is to be impressed on troops and commanders. Reports that instruction on this point has been given are to be handed in by companies by 18-3-18, with the evening report."

### PURSUIT SQUADRONS

(R. A. F. 24-4-18)

A prisoner states that pursuit flights have been grouped in pursuit squadrons (each with 3-4 flights) along the battle front, and believes that this system is in force on the whole British front.

Formerly, on battle fronts, pursuit flights were often found grouped, under one command, into "Jagdstaffelgruppen" for operations only ; the formation and composition of these, however, was purely temporary, where as pursuit squadrons, a prisoner states, are more in the nature of permanent units, although a flight may be transferred from one squadron to another.

The commander of the pursuit squadron is responsible for the tactical and administrative control of all flights in the squadron.

Note. — Apart from ensuring better co-ordination of action of scout machines, the formation of these pursuit squadrons was probably due to the necessity of organizing them in formations, together with older and more experienced flights.

### LIGHTING OF AIRDROMES

From statements of prisoners captured by the French, the grounds used for landing at night are lit only on demand from the German planes which establish their identity by firing a white rocket which divides itself into several white stars. The grounds then show two white lights and a red light. The pilot indicates that he wants to land by firing a red rocket. The signals used probably vary in the different armies and are subject to change from time to time.

There are false aviation grounds lighted all night all night by two white and one green light.

### EFFECT OF ALLIED AIR OPERATIONS

Extracts from note books and letters captured by the French.

9th Div. 19th Inf. Regt. 22nd March. Near Artemps, east of Ham.

"Night is falling. We are in a marshy country, and advance step by step. Bombed by aircraft. The company commander is killed, and men in the company are wounded. The company commander utters a terrible cry : Good-bye, my company' this has a terrifying effect on the men"

2nd Bav. Div. 20th Bav. Inf. Regt. 27th /28th March. Villers-aux-Flos.

"The night was very disturbed. Aviators dropped bombs on an ammunition dump near us and set it on fire".

24th March (evening) "The train took us through Longuyon, where the station and its neighborhood were a heap of smoking ruins. There had been an air raid earlier in the evening".

Another man of the same regiment writes :

31st March/1st April. "Bivouac near Beaucourt. The whole night was very disturbed. There was much aerial activity, 5 officers were killed, 35 men wounded, and 15 horses killed".

April 1st—near Harbonnieres.

"We were not engaged yesterday or today, but we have had almost more losses than the troops in front, namely, from aircraft and shelling. I shall never forget last night. English aeroplanes flew over us continually and dropped bombs on our bivouac in the wood. In the morning we saw the terrible devastation. Many dead, mutilated, awful. I thought that perhaps it would be better if I were already like one of them".

April 2nd.—72nd Res. Inf. Regt. Near Amiens.

"We are now to the S. E. of Amiens ; we are in a very difficult situation. To the left we have the British and before us we have the French ; above us, aviators, so that one does not know any more where to hide. Yesterday during the night, bombs were dropped by an enemy airplanes ; 5 officers were killed ; 35 men wounded, 15 horses killed"

#### EFFECT OF RAIDS IN BAVARIA

(BRITISH S. OF A. I., APRIL 16, 1918).

A Karlsruhe telegram published in the "Frankfort Gazette" of 13th April, 1918, announces that the Second Chamber of the Bavarian Diet has unanimously passed a resolution, proposed by the Social Democrats, requesting the Government to try to get the Federal Council and the Imperial Authorities to bring about general agreements for the cessation of aerial attacks on places outside the area of military operations.

A representative of the Bavarian Government welcomed the motion, saying that the Ministry of the interior was already in communication with the Ministry of War on the question.

# SUMMARY OF AIR INFORMATION

## AIR INTELLIGENCE BULLETIN

SUMMARY FOR THE PERIOD 18TH TO 24TH APRIL, INCL.

### NEW IDENTIFICATIONS

(Regions corresponding to those occupied by German Armies.)

Flights.	In Region of.	From Region of.
1 Pursuit .....	Flanders .....	Woevre.
2 Pursuit .....	River Lys to Arras.....	Flanders (1) Woevre (1).
4 Observation.....	River Lys to Arras.....	Flanders (2) Arras-Bapaume (1) Italy (1).
2 Pursuit .....	Arras-Bapaume .....	Rheims (1) Laon (1).
1 Pursuit Flight School.....	Arras-Bapaume .....	Previously unidentified.
1 Pursuit .....	Bapaume-Peronne .....	Arras-Bapaume.
1 Observation .....	Bapaume-Peronne .....	Italy.
3 Pursuit .....	Peronne-Chauny .....	New unit (1) Champagne (1) Lately unlocated (1).
4 Protective .....	Peronne-Chauny .....	Flanders (2) Laon (2).
9 Observation .....	Peronne-Chauny .....	River Lys-Arras (2), Laon (2), Rheims (1), Woevre (1), Verdun (2), Eastern Front (1), Italy (1).
1 Pursuit .....	Laon .....	New unit.
4 Observation .....	Laon .....	Bapaume-Peronne (1), Rheims (1), Eastern Front (1), Lately unlocated (1).
1 Pursuit .....	Rheims .....	New unit.
1 Bombing .....	Champagne.....	Lately unlocated.
1 Pursuit .....	Verdun .....	Lately unlocated.
1 Observation .....	Verdun .....	Rheims.

### AIRDROMES

Region.	Confirmed.		Removed.	
	Sheds.	Hangars.	Sheds.	Hangars.
Flanders .....	..	1	..	1
River-Lys-Arras .....	10	10	..	..
Arras-Bapaume .....	4	..	..	4
Bapaume-Peronne .....	..	..	..	5
Peronne-Chauny .....	18	260	..	7
Laon.....	..	7	..	..
Total .....	32	278	..	17

NOTE.—9 Pursuit Flights, 7 Protective Flights, and 16 Observation Flights are now identified in the advanced area (Bapaume-Peronne and Peronne-Chauny regions). Forty airdromes have been confirmed by photograph in this area, and one additional airdrome reported by observation.

### DISTRIBUTION OF GERMAN AIR FORCES IDENTIFIED TO APRIL 24th, INCL

Region.	Flights By Class.				Total.
	Pursuit (18 machines)	Bombing (12 machines)	Protective (6 machines)	Observation (6 machines)	
Flanders .....	10	6	4	9	29
River Lys-Arras .....	8	3	6	17	34
Arras-Bapaume .....	10	6	3	18	37
Bapaume Peronne.....	3	..	4	10	17
Peronne-Chauny .....	10	3	8	24	45
Laon .....	12	3	4	24	43
Rheims .....	2	..	..	7	9
Champagne .....	4	1	..	7	12
Verdun .....	2	..	2	11	15
Woevre .....	3	1	2	7	13
Lorraine .....	..	..	..	6	6
Alsace .....	3	..	..	10	13
E. Europe .....	1	..	1	21	23
Asia .....	..	..	..	6	6
Interior .....	..	..	..	2	2
Not located .....	4	1	3	22	30
Total Flights .....	72	24	37	201	334

NOTE.—The increase of 3, over the total number of flights reported April 17th, is accounted for by the identification of the following new pursuit flights: 61st; 69th; and 74th.

### CASUALTIES AMONG LEADING GERMAN AIRMEN

On March 1, 1918, 25 German airmen had to their credit 12 or more victories each. Of these the following 5 have since been killed.

Captain von Richthofen, credited with 80 victories.	
Lieutenant Bongartz,	33
Capt. Ritter von Tutschek,	24
Lieutenant Bethge,	20
Lieutenant Gotsch,	17

Lieutenant von Richthofen has been wounded in the head. He is credited with 29 victories.  
Lieutenant Hans Muller now leads the German airmen with 38 victories to his credit.

# SUMMARY OF AIR INFORMATION

## AIR INTELLIGENCE BULLETIN

### NEW IDENTIFICATIONS

The change in the names of regions is made to correspond with a change in the boundaries of the German Armies occupying these regions.

Flights,	In Region of,	From Region of,
16th Pursuit .....	Lys-Vimy .....	Laon.
76th Pursuit .....	Lys-Vimy .....	Alsace.
77th Pursuit .....	Lys-Vimy .....	Alsace.
18th Reconnaissance .....	Vimy-Bapaume .....	Lys-Vimy.
35th Pursuit .....	Vimy-Bapaume .....	Flanders.
7th Bombing .....	Vimy-Bapaume .....	Lately unlocated.
18th Pursuit .....	Bapaume-Moreuil .....	Laon.
42nd Pursuit .....	Bapaume-Moreuil .....	Lately unlocated.
78th Pursuit .....	Bapaume-Moreuil .....	(See note).
32nd Reconnaissance .....	Bapaume-Moreuil .....	Moreuil-Noyon.
15th Protective .....	Bapaume-Moreuil .....	Verdun.
18th Protective .....	Moreuil-Noyon .....	Flanders.
23rd Reconnaissance .....	Moreuil-Noyon .....	Laon.
14th Single-Seater Fighter Flight (Kest).	Interior .....	Not previously identified.

NOTE:— The 78th Pursuit Flight was wrongly located in the Flanders region in Air Intelligence Bulletin, Serial No. 7. This flight is located in the Bapaume-Moreuil region.

### AIRDROMES

#### CONFIRMED BY PHOTOGRAPH

Region.	Increase.		Removed.	
	Sheds.	Hangars.	Sheds.	Hangars.
Lys-Vimy .....	..	7	1	2
Vimy-Bapaume .....	3	..	2	..
Bapaume-Moreuil .....	4	15	..	26
Moreuil-Noyon .....	..	28	..	..

### USE OF ANTI-AIRCRAFT AGAINST AIRPLANES

(R. A. F., APRIL 27, 1918).

The following translation of a captured German divisional order shows the measures adopted by the enemy to engage low flying machines :

6TH BAVARIAN DIVISION. DIVISIONAL H. Q., 12 APRIL, 1918.  
1 A No. 2248. 6,30 p. m.

#### DIVISIONAL ORDER

During the recent fighting, it has again been shown that the troops, more especially the artillery, have been much harassed by low flying aeroplanes. The most effective defensive measures consist principally in the infantry and artillery always having their machine guns ready for anti-aircraft defense and making use of them. In the case of the artillery, it is essential that machine guns be ready to open fire both in battery positions and on the march, and also in limber parks (the machine guns will be mounted on the limbers). Further, all carrying parties and columns must take their rifles with them.

### GERMAN MACHINES

(R. A. F., APRIL 27, 1918).

A captured pilot states that the Junker scout (previously reported by prisoners to be a monoplane) is expected to make its appearance at the front in the near future. Great hopes are placed in this machine, as its performance is stated to be very good.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

LYS-VIMY REGION.			
14th Protective Flight.....	April 26 .....	Machine shot down N. E. of Ypres, by British. Last identified at Stenay (Verdun region) October, 1917.	
VIMY-BAPAUME REGION			
11th Protective Flight.....	Haplincourt.. April 24 .....	Machine shot down near Bouzincourt by British. Last identified at Engel (Flanders region) 15th February.	
BAPAUME-MOREUIL REGION			
1st Pursuit Squadron.....	Peronne area April 19 .....	Prisoner's statement, R. A. F. Last identified in the Denain area (Vimy-Bapaume region) 28th March.	
NOTE.—This squadron consists of the 4th, 6th, 10th, 11th, 18th and 46th Pursuit Flights; the 11th Flight was identified at Cappy airdrome (West of Peronne) on April 21st.			
241st "A" Flight .....	Rosieres..... April 19 .....	Prisoner's statement, R. A. F. Last identified at Sierenz (Alsace) 24th March.	
269th "A" Flight .....	Rosieres..... April 19 .....	Prisoner's statement, R. A. F. Last identified at Busigny (same region) 4th March.	
MOREUIL-NOYON REGION.			
17th Pursuit Flight.....	April 21 .....	Prisoner's statement R. A. F. Last identified at Sissonne (Laon region), September, 1917.	

## IDENTIFICATIONS

11th Pursuit Flight..... Peronne area, Bapaume-Moreuil region . 19th April ..... British.

## AIRDROMES

### (a) New airdromes.

#### MOREUIL-NOYON REGION.

Cremery .....	6 hangars .....	French photograph .....	12th April
Hangest, E. ....	9 hangars .....	French photograph.....	20th April

### (b) Changes in accommodation.

#### MOREUIL-NOYON REGION.

Biarre .....	+ 1 hangar .....	French photograph.....	12th April.
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## LOW FLYING PATROLS

A captured German document from the office of the Chief of the General Staff of the Armies in the Field, signed by General Ludendorff, contains the following paragraph relating to the role of low flying patrols in battle :

"Aviation patrols flying at low altitude are not special formations. Reconnaissance and protective airplanes must be trained for this work. It is recommended that these patrols be required to fly in divisional sectors by small groups and in single file. Infantry and artillery are the special objectives for their machine guns."

## ACTIVITY

On April 29th our aviators attacked and brought down in flames, inside the German lines between Montsec and St. Baussant, one enemy single-seater scout machine.

## HOME DEFENSE UNITS

A prisoner of the 43d Pursuit Flight, captured by the British, states that he had been with a detachment of the 1st Single-Seater Fighter Flight (Kest) at Sandhofen (Mannheim) for a few weeks.

This detachment consisted of 6 machines (D. 3 and D. 5 Albatros scouts); another portion of the unit (believed by the prisoner to be near Mannheim) is similarly equipped.

The strength of these home defense units varies from 8 to 12 machines and the personnel consists chiefly of pilots who have been sent to Germany for a rest.

Machines of these flights are standing by all day and, in some units, a few pilots are detailed to fly at night in the event of a raid.

The prisoner states that home defense flights meet with little or no success, as neither machines nor personnel are adequate for the work; the home defense authorities rely principally on pursuit flights at the front to engage our bombing formations.

Further, he states that attacks on British bombing machines are very unpopular, owing to their excellent performance and fighting qualities.

SITUATION OF THE GERMAN AIR FORCES  
OF THE  
WESTERN FRONT

FROM BRITISH SUMMARY OF AIR INTELLIGENCE, APRIL 24

*Battle Area North of the La Bassee Canal.*

20 Reconnaissance Flights.....	372	machines
11 Pursuit Flights.....	198	"
6 Protective Flights.....	36	"
Total .....	354	"

*Remainder of the Western Front—Northwards.*

6 Reconnaissance Flights.....	36	machines
5 Pursuit Flights.....	79	"
4 Protective Flights.....	24	"
Total.....	139	"

*Battle Area South of the La Bassée Canal.*

62 Reconnaissance Flights.....	372	machines
37 Pursuit Flights.....	666	"
21 Protective Flights.....	126	"
Total .....	1,164	"
Battle areas. Total.....	1518	machines

*Remainder of the Western Front—Southwards.*

58 Reconnaissance Flights.....	348	machines
15 Pursuit Flights.....	270	"
3 Protective Flights.....	18	"
Total.....	636	"
Other than Battle areas. Total....	775	machines

*Unlocated Western Front*

7 Reconnaissance Flights.....	42	machines
4 Pursuit Flights.....	72	"
— Protective Flights .....	—	"
Total.....	114	"

GRAND TOTAL ON WESTERN FRONT (exclusive of bombing machines) :—..... 2,407 machines



# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

VIMY-BAPAUME REGION.  
2d Reconnaissance Flight ..... Cambrai area ..... March 14..... Document, R. A. F. Last identified on Western front (unlocated) February 27.

MOREUIL-NOYON REGION.  
226th "A" Flight ..... Dury (E. of Ham) ..... April 24..... Prisoner's statement, R. A. F. Last identified in Rheims region February 23.

## IDENTIFICATIONS

LYS-VIMY REGION.  
33d Pursuit Flight ..... Douai area ..... March 31..... Document, R. A. F.

## EQUIPMENT AND DUTIES OF UNITS

FROM PRISONERS' STATEMENTS, R. A. F. SUMMARIES, APRIL 25, 26, 27.

The 12th Pursuit Flight is equipped with Fokker triplanes.

The 16th Pursuit Flight is equipped with Fokker triplanes with 160 h. p. rotary engines.

NOTE.—Information regarding a new rotary engine of 160 h. p. has lately been obtained from various prisoners; it appears to be made by the Siesmens-Schuckert works, and to be used in Fokker triplanes and Fokker biplane scouts.

No intimation had previously been received that Fokker triplanes with these engines are already being flown at the front.

The 23rd Pursuit Flight is equipped with 12 Albatros D.5 scouts.

The 35th Pursuit Flight is equipped with 2 Pfalz and 3 Albatros D.5 scouts. A prisoner of this flight states that his unit has for some time been considerably under establishment. The prisoner joined his unit at the end of February, since which date the flight has never possessed more than six pilots.

The 23rd and 35th Pursuit Flights work under the Commander of Aviation of the Seventeenth Army.

The 42nd Pursuit Flight is equipped with Albatros scouts.

The 43rd Pursuit Flight (Avelin airdrome, Lille area) is equipped with 9 Albatros scouts (six D.5 and three D.3). The flight is under the orders of the Commander of Aviation, Sixth German Army. This is much below the normal establishment.

The 76th and 77th Pursuit Flights were first equipped with a new type Roland D.5 scout with a 200 h. p. stationary engine; these machines, however, were unsatisfactory—there were many cases of machines breaking up in the air—and the flights were reequipped with Fokker triplanes (110 h. p. Oberursel engines).

The 78th (Bavarian) Pursuit Flight (Péronne area) is equipped with 14 (Albatros D.5 and Pfalz) scouts.

The 23rd Reconnaissance Flight is equipped with 10 Rumpler machines (with Maybach engines) and carries out long-distance reconnaissance for the Eighteenth German Army.

The 212th "A" Flight (Ham area) is equipped with 9 two-seaters, two of which are armoured machines for contact patrol duties; this flight carries out artillery work and close reconnaissance for two divisions

## FROM FRENCH 1ST ARMY BULLETIN, APRIL 21.

A captured aviator machine gunner (*aviateur mitrailleur*) from the 22nd Protective Flight (Bapaume-Moreuil region) states that this flight is equipped with 6 Halberstadt machines, 200 h. p. Benz motors. The flight is commanded by Lieut. Mexel. It has 8 pilots (1 officer and 7 non-commissioned officers or soldiers) and 7 machine gunners. It furnishes machines for the protection of the 239th "A" Flight, with which it occupies an airdrome midway between Caix and Rosieres.

The 239th "A" Flight has 12 officer-observers and works in conjunction with the 15th Infantry Division.

NOTE.—The 15th Division is now in reserve having, subsequent to the prisoner's statement, been relieved by the 13th Division.

## REPLACEMENT OF MATERIAL AND PERSONNEL

A machine gunner from the 22nd (Bav.) Protective Flight, recently captured by the French, states that it takes some time to obtain replacement of material. On April 1st, the flight had 6 machines; two of them were lost between the 1st and 4th, one as the result of an accident and one brought down by the enemy. Only one had been replaced to April 17. Spare parts and motors could be obtained without difficulty at the Army Aircraft Park.

The same prisoner states that although the 22nd Protective Flight is a Bavarian Unit there are 4 Prussians in its flying personnel; the reason for this being that there are not a sufficient number of trained Bavarian pilots, observers and machine-gunners to make the personnel of Bavarian units exclusively Bavarian.

NOTE.—In this connection it is interesting to note the statement of a Bavarian pilot of the 205th "A" Flight (Prussian unit, Lille area) captured by the British about April 10, that he had been temporarily transferred to a Prussian flight because of shortage of Prussian pilots. (*Air Intelligence Bulletin*, April 17.)

## GERMAN MACHINES

R. A. F. SUMMARY, APRIL 25.

Junker armoured two-seater. —A prisoner states that the only vulnerable point of attack on this machine is from the rear, at an angle and slightly above.

Siemens-Schuckert rotary engine.—It is reported by a prisoner that this engine is 160 h. p. ; it is fitted to the Fokker biplane, and, in some cases, to the Fokker triplane.

#### AIRPLANE SHED BUILDING DETACHMENTS

FROM R. A. F. SUMMARY, APRIL 29.

A prisoner recently captured states that one airplane shed building detachment (*Flieger-Hallenbau-Abteilung*) is attached to each Army ; the Second Army Detachment is at Valenciennes, its headquarters being at the Second Army Aircraft Park.

These detachments work over the whole of the Army area, and erect the wooden sheds at airdromes ; canvas hangars are always erected by units.

The detachment is also responsible for preparing the ground for new airdromes ; for this work, however, the labor employed is chiefly civilian.

#### GERMAN AIRMEN

FROM R. A. F. SUMMARIES, APRIL 26, 28.

Captain von Brandt commands the 23d Reconnaissance Flight.

Lieutenant Deling commands the 16th Pursuit Flight.

Lieutenant Grein commands the 34th Pursuit Flight.

Lieutenant Diemer commands the 35th Pursuit Flight.

Lieutenant Flecken commands the 43d Pursuit Flight.

Lieutenant Zieler commands the 14th Protective Flight.

Lieutenant Hanstein, credited with 15 air victories by the 1st March, was killed in aerial combat during the first week in March ; he was in command of the 35th Pursuit Flight, then at Emerchicourt airdrome.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### BAPAUME-MOREUIL REGION.

207th "A" Flight ..... Peronne area ..... April 24..... Prisoner's statement, R. A. F. Last identified at Escaufort (same region) March 17.

## IDENTIFICATIONS

### MOREUIL-NOYON REGION:

69th Pursuit Flight..... Collezy ..... April 21..... Machine shot down by the French. (R. A. F.)

## COMBATS

On May 2 one of our machines attacked, at 4800 meters, and brought down in flames near Viéville (in the German lines) a single-seater pursuit machine probably an Albatros. Our machine was slightly damaged in the combat and had to make a forced landing ; the pilot is uninjured.

## MARKING ON GERMAN MACHINE

With reference to the Supplement to *Air Intelligence Bulletin*, Serial No. 6, of April 24, the Albatros machine, belonging to the 64th Pursuit Squadron, stationed at Mars-la-Tour, which was shot down the morning of April 14, 1918, by one of our airmen, bore the type of markings described. These markings consisted of rectangular crosses similar to the one portrayed in the supplement. The new type of cross had been made by painting out the flaring corners of the Maltese cross, with which the plane had previously been marked.

On April 25, hostile machines with rectangular black crosses in a white circle, instead of the Maltese cross, were seen on the Belgian front.

## 64th PURSUIT FLIGHT

### FROM FRENCH VIII<sup>TH</sup> ARMY BULLETIN, APRIL 17.

The following are extracts from a supplementary examination of a pilot of the 64th Pursuit Flight brought down near Toul on April 14. (For previous examination see *Air Intelligence Bulletin*, April 19.)

#### PERSONNEL :

The enlisted personnel of the flight consists of about 100 men, of whom 3 mechanics are specially assigned to each machine. In addition to the officer commanding the flight there is one officer having special duties (*Offizier zur besonderen Verwendung*) and an Adjutant Chief Mechanic.

#### MACHINES :

The Albatros D5 was a subject of much discussion when it first appeared and was then considered inferior to its predecessor D 3. It now enjoys a great popularity among German aviators. It is preferred to the Pfalz, although its climbing qualities are not quite so good.

The prisoner is unaware of criticism against the pursuit planes now in the German service. He admits that the German planes may be slightly inferior to the Allied planes in speed and climbing power, but he has more confidence in the German motors and construction.

#### ARMAMENT :

Two machine guns of the lightened Spandau type, synchronized by a flexible shaft ; the one firing perforating bullets and the other tracers. They can be fired at the same time, or in succession.

#### MARKINGS OF THE FLIGHT :

All machines of the flight have large parallel bands alternately red and black on the fixed plane and the depth rudder. This insignia is probably common to all the Wurtemberg flights.

#### NEW MACHINES :

The prisoner does not know the new types of machines now under trial. He saw at Koenigsberg a Giant machine with 4 motors (2 in front and 2 behind), but he knows nothing of their characteristics. The machine which the prisoner was flying has certain reinforcements which did not exist on a similar machine captured in March. The uprights of the lower plane are fixed more permanently by a little strut attached at one end to the forward upright and at the other end to the first string piece.

## SUMMARY OF AIR INFORMATION

## IDENTIFICATIONS

FLANDERS REGION.			
2d Naval Pursuit Flight....	Houttave ..	April 25 .....	Machine shot down. R. A. F.
LYS-VIMY REGION.			
7th Reconnaissance Flight ...	.....	April 29 .....	Machine shot down. R. A. F.
WESTERN FRONT (UNLOCATED).			
80th Pursuit Flight .....	.....	March 17 and April 6.....	Document. R. A. F. Not previously identified.

## SHORTAGE OF OBSERVERS

FROM R. A. F. SUMMARY, MAY 1.

A prisoner of the 7th Reconnaissance Flight, who was recently transferred from a unit in Roumania, states that on his arrival, about April 23, there were only two observers in this unit; the flight was up to establishment in pilots.

The prisoner further states that there is difficulty in replacing observers, and believes the shortage to be the cause of his transfer from Roumania.

## EQUIPMENT AND DUTIES OF UNITS

FROM R. A. F. SUMMARIES, APRIL 28, 30 AND MAY 1.

The 7th Reconnaissance Flight is equipped with 6 D. F. W. two-seaters; the flight carries out close reconnaissance and artillery work in the Nieppe Forest area.

During the operations on the Lys battle front, the flight was employed mainly on counter-attack patrol work.

The 14th Protective Flight is equipped with 6 Halberstadt two-seaters, and works for a reconnaissance flight. On battle days, the flight carries out low flying in support of the infantry attack (it co-operated in the last attack in the Kemmel Hill area.)

The 18th Protective Flight (Ham area) is equipped with 7 two-seaters and works for the 226th "A" Flight.

## GERMAN BOMBING AVIATION

FROM PRISONERS' STATEMENTS, FRENCH HD ARMY BULLETIN, APRIL 25.

Instead of 4 squadrons of 6 flights, composed of 6 machines each, making a total of 144 machines, bombing aviation is now divided into 7 squadrons, six of which have 3 flights with 8 machines per flight, and one 6 flights of 8 machines each, to which is attached one flight of 5 or 6 giant machines (*Riesenabt.* No. 501); making a total of about 200 machines.

The flights are very often incomplete. The large squadron, Bogohl III (*Bomben. Geschwaderheeresleitung III*) is used specially in operations against England (*England Geschwader*).

## SCHOOLS:

At Paderborn—General training school for pilots and machine gunners (*Geschwaderschule*).

At Doeberitz—Study of bombs (*Bombenversuchsanstalt*).

At Frankfort-on-the-Oder—School for observers (*Bombenlehranstalt*).

## BOMBING MACHINES

Friedrichshafen (three-seater). For medium distance objectives.

Gotha (bi-motor, three-seater). For long distance objectives.

Giant Airplanes (*Riesenflugzeuge*).

The Gotha can fly above 4000 meters, with 450 kilograms of bombs and 1050 liters of gasoline. Lighter than the Friedrichshafen, it is also much more frail, particularly in its superstructure and landing gear, requiring specially prepared fields.

The special flight of giant airplanes, No. 501, consists of 5 or 6 machines of different types; Albatros, A. E. G. and Friedrichshafen. These machines are very strong, have 4 motors and can carry 8 passengers. They are capable of carrying 1000 kilos. of bombs.

## NEW MAYBACH MOTOR:

The Maybach factories are constructing a motor of 320 h. p., which is very light (0 k. 65 per h. p.).

## LOSSES:

The losses are of a great deal of consequence. Since its establishment (July, 1917) the normal personnel of the Bogohl III (40 officers) has been renewed four times. The 17th flight has lost 29 machines. Following one bombardment of London but one machine of the flight returned. Of 17 machine gunners, who joined the flight in July, 1917, 13 are missing. The large losses sustained, both in the course of bombardment flights and in trial flights, have resulted in a lowering of morale in the German bombardment aviation. It is becoming more difficult to obtain aviator personnel for bombardment aviation.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### MOREUIL-NOYON REGION.

218th "A" Flight ..... Etreillers (W. of St. Quentin). April 29. Machine shot down, R. A. F. Last identified in Alsace March 20.

## CHANGES ON THE WESTERN FRONT

The following is a summary of changes in location of units on the Western front for the period April 25, to May 2.

To—	Unit—	From—
River Lys-Vimy Region.....	16th Pursuit Flight .....	Laon.
	76th Pursuit Flight .....	Alsace.
	77th Pursuit Flight .....	Alsace.
	14th Protective Flight .....	Verdun.
Vimy-Bapaume Region .....	35th Pursuit Flight .....	Flanders.
	7th Bombing Flight.....	Lately unlocated.
	11th Protective Flight .....	Flanders.
	2d Reconnaissance Flight.....	Lately unlocated.
Bapaume-Moreuil Region.....	18th Reconnaissance Flight .....	River Lys-Vimy.
	18th Pursuit Flight.....	Laon.
	42d Pursuit Flight .....	Lately unlocated.
	78th Pursuit Flight .....	Woivre.
	1st Pursuit Squadron .....	Vimy-Bapaume.
	15th Protective Flight .....	Verdun.
	32d Reconnaissance Flight.....	Moreuil-Noyon.
Moreuil-Noyon Region.....	241st "A" Flight.....	Alsace.
	17th Pursuit Flight .....	Laon.
	18th Protective Flight .....	Flanders.
	23d Reconnaissance Flight.....	Laon.
	218th "A" Flight .....	Alsace.
	226th "A" Flight .....	Reims.
Unlocated .....	80th Pursuit Flight .....	New unit.

NOTE.—The R. A. F. Summary of April 29, direct ing attention to the increase in protective flights in the St. Quentin sector, contains the following paragraph:

"Captured orders and instructions emphasize that such flights are to be used in cooperation with the infantry attack. The presence of a large number of these flights, taken in conjunction with the transfer of von Richthofen's squadron (1st Pursuit Squadron) from Denain to the Somme area, indicates that the latter area is still regarded as the main battle front.

## GERMAN AIRMEN

The following list of leading German airmen, with their victories up to April 1, is taken from the Vossische Zeitung of the 11th April:

*Rittmeister Freiherr von Richthofen (since killed)...	74	Lieutenant Menckhoff .....	20
*Lieutenant Bongartz (since killed) .....	33	Lieutenant Thuy .....	20
*Lieutenant Buckler .....	30	Lieutenant Kissenberth.....	18
*Lieutenant Freiherr von Richthofen (wounded).....	29	Lieutenant Goring.....	17
*Captain Berthold .....	28	Lieutenant Gottsch (since killed).....	17
*Lieutenant Bernert .....	27	Lieutenant Jul. Schmidt .....	15
*Lieutenant Wusthoff .....	27	Lieutenant Hanstein (missing—reported killed on	
*Lieutenant Schleich .....	25	March 21) .....	15
*Lieutenant Lorzer .....	24	Sergt. Major Thom .....	14
Sergt. Major Baumer.....	23	Lieutenant Lowenhardt .....	13
*Lieutenant Klein .....	22	Lieutenant Boning .....	13
Lieutenant Udet.....	22	Lieutenant Auffahrt.....	12
*Lieutenant Kroll .....	22	Lieutenant Jakobs .....	12
		Lieutenant Schlenker.....	12
		Sergt. Major Konnecke.....	12

\*Decorated with the Order Pour le Mérite.

## COMBATS

During the course of a patrol on May 3, over the German lines in the Lunéville area, five of our machines attacked at 10.40 a. m., at 3,500 meters, a hostile patrol of four monoplane and one biplane machines. One of the hostile machines was shot down near Amenoncourt. One of our machines is missing.

## EQUIPMENT AND DUTIES OF UNITS

### FROM R. A. F. SUMMARY, MAY 2.

The 218th "A" Flight is equipped with 1 Junker armoured, 2 L. V. G., and 6 D. F. W. two-seaters; it is chiefly employed on artillery work.

## NEW FORMATIONS

### FROM R. A. F. SUMMARY, APRIL 29.

Pursuit Flights.—A total of 30 new pursuit flights have been identified since November, 1917, of which 21 appear to be now on the battle front between Ypres and the Oise. The majority of them appear to have been formed during the early part of this year.

The average strength of a flight does not at present appear to exceed 12 machines, so that these new formations represent a total increase to the German Air Forces of 360 scout machines since 1917, of which 252 appear to be available on the battle front.

Protective Flights.—Two newly-formed flights have recently been identified (Nos. 37 and 38). It seems possible that Nos. 35 and 36 also exist. This would represent a total increase of 24 machines. These flights appear now to be equipped with Hannoveraner and Halberstadt two-seater machines and are intended for employment in cooperation with the infantry attack. Hence, any marked increase in these units on a front may indicate offensive intentions on the part of the enemy.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATIONS OF UNITS

### RIVER LYS-VIMY REGION.

49th Pursuit Flight .....	Lille area.....	March 8.....	French. New unit, not previously identified.
80th Pursuit Flight .....	Lille area.....	April 26.....	Prisoner's statement, R. A. F. Last identified on Western front (unlocated), April 6.
1st Protective Flight .....	N. of Lille .....	April 30.....	Prisoner's statement, R. A. F. Last identified in Courtrai area, January 15.
10th Protective Flight .....	N. of Lille .....	April 30.....	Machine shot down, R. A. F. Last identified at Longavesnes (Bapaume-Moreuil region), April 7.
23th Protective Flight .....	N. of Lille .....	April 30.....	Prisoner's statement, R. A. F. Last identified at Framerville (Bapaume-Moreuil region), April 12.

### VIMY-BAPAUME REGION.

45th Pursuit Flight .....	N. of Cambrai.....	April 26.....	Prisoner's statement, R. A. F. Last identified at Cohartille (Laon region), March 26.
59th Pursuit Flight .....	N. of Cambrai.....	April 26.....	Prisoner's statement, R. A. F. New unit not previously identified.
8th Pursuit Squadron .....	H. Q., Epinoy.....	April 26.....	Prisoner's statement, R. A. F. Not previously identified.
19th Protective Flight .....	Douai area .....	April 7.....	Document R. A. F. Last identified in Lille area, March 28.
246th "A" Flight .....	Abscon .....	April 26.....	Prisoner's statement, R. A. F. Last identified in the Balkans in February.
263d "A" Flight.....	Lens area .....	April 2.....	French. Last identified in Cambrai area-March 12.

### BAPAUME-MOREUIL REGION.

228th "A" Flight .....	Etricourt (S. E. of Bapaume) .....	April 29.....	Prisoner's statement, R. A. F. Last identified in Verdun region, October 1917.
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### MOREUIL-NOYON REGION.

12th Pursuit Squadron .....	H. Q., Ercheu.....	April 21.....	Prisoner's statement, R. A. F. Not previously identified.
1st Bombing Squadron .....	S. Quentin .....	April 24.....	French. Last identified at Etreux (Same region), March 11.
4th Bombing Squadron.....	Beauvois (near St. Quentin) .....	April 21.....	French. Last identified in Valenciennes area (Vimy-Bapaume region), March 10.
7th Protective Flight .....	With 18th German Army.....	April 1.....	French. Last identified in Laon region in January.
31st Protective Flight .....	Hangest .....	May 3 .....	Machine shot down, R. A. F. Last reported by French to be on Eastern front, October, 1917.
206th "A" Flight .....	Moreuil-Sauvillers area	May 3 .....	Machine shot down, R. A. F. Last identified in Laon region, March 10.

### LAON REGION.

5th Pursuit Flight .....	With 7th German Arm.	March, 1918...	French. Last identified in Vimy-Bapaume region, November, 1917.
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### VERDUN REGION.

21st Pursuit Flight .....	Stenay.....	March, 1918...	French. Last identified in Rethel area (Reims region), February 15.
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### WESTERN FRONT (UNLOCATED).

8th Bombing Flight.....	.....	.....	French. Left Metz March 10.
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## IDENTIFICATIONS

### RIVER LYS-VIMY REGION.

266th "A" Flight .....	.....	.....	Machine shot down near Poperinghe, R. A. F.
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### VIMY-BAPAUME REGION.

23d Pursuit Flight .....	.....	May 3 .....	Machine shot down, R. A. F.
According to a prisoner the 8th Pursuit Squadron consists of the 23d, 35th, 45th and 59th Pursuit Flights. (R. A. F. May 3).			
The 12th Pursuit Squadron consists of the 24th, 44th and 79th (Bav.) Pursuit Flights. (R. A. F., May 4).			

## DIVISIONAL AVIATION

From a study of the operations of the 18th German Army, from the 21st March to the 5th April, by 2d Bureau—French G. Q. G., 20th April, 1918.

To each division was attached one flight whose principal mission was to support the Infantry, not only in signaling the location of the enemy and in directing the Artillery, but also in attacking the enemy in intimate liaison with the Infantry.

## BOMBING DURING RECONNAISSANCES

Information furnished by the Aviation Officer of the 22d Combat Flight made prisoner April 21, 1918.

Extremely rigorous orders have been given to aviators against carrying any document with them which may give information to the enemy or which will allow the identification of the flight.

The machines of the prisoner's flight have been carrying for several days two bombs at each ascent. Their orders were to throw them on the railroad from Ailly-sur-Noye. This order which the aviators are at a loss to explain is rather unsatisfactory to them ; these bombs add weight to the machine, and it frequently happens that they are discharged at any spot previous to the return of the aviator.

#### **PURSUIT SQUADRONS**

(FROM R. A. F. SUMMARY, MAY 4.)

From prisoners' statements, it appears that pursuit flights on the battle front have been definitely organized into permanent squadrons (*Jadgeschwader*), and not into groups (*Jagdstaffelgruppen*), though occasionally they are still referred to under the latter title. Groups appear to exist only outside the battle front and to be temporary organizations, varying in composition according to the number of units located in an army area.

#### **SQUADRON DISTINCTIVE MARKINGS**

(FROM R. A. F. SUMMARY, MAY 4.)

A prisoner of the 35th Pursuit Flight states that the squadron marking on machines of the 8th Pursuit Squadron (operating north of Albert) is a large "V" painted in white on the top plane ; the apex of the "V" is over the leading edge of the center section. Further, on the bottom surface of the lower plane there is a black line on either side of the fuselage running from the inner corner of the leading edge outwards and backwards, representing the arms of a "V".

#### **GERMAN PRECAUTIONS AGAINST ENEMY AIRCRAFT**

(FROM R. A. F. SUMMARY, MAY 4.)

The following is a translation of a captured document (company order) :

Company H. Q., 28-3-18.

To Section Commanders :

When hostile aviators approach, every man will immediately take cover and remain motionless.

At night, no fires or lights will be lit, and caution will be observed in smoking.

Movement in the trenches must be reduced to a minimum. Only one man from each section will be sent to fetch rations. The others will remain in the trenches.

Section commanders are responsible for carrying out these instructions.

LILLIE, Lieut. . . .

Commanding 11th Co., 79th I. R.

NOTE.—The 79th Inf. Regt., 20th Division, was in the Bapaume area on the 28th March.



# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

FLANDERS REGION.			
28th Pursuit Flight.....	Marcke .....	May 3.....	Prisoner's statement, R. A. F. Last identified in Iseghem area (same region), February 21.
RIVER LYS-VIMY REGION.			
258th "A" Flight.....	Linselles .....	May 3.....	Prisoner's statement, R. A. F. Last identified at Cantin (Vimy- Bapaume region), March 28.
36th Protective Flight.....	Ronchin .....	May 3.....	Prisoner's statement, R. A. F. New unit, not previously identified.
MOREUIL-NOYON REGION.			
297th "A" Flight.....	Villeselve .....	May 3.....	Prisoner's statement, R. A. F. Last identified in the Argonne, March 14.
18th Army Aircraft Park.....	Ham .....	May 3.....	Prisoner's statement, R. A. F. Last identified at Guise, April 16.

## IDENTIFICATIONS

FLANDERS REGION.			
501st Giant Airplane Flight.....	Scheldewendeke and Mariakerke.....	May 3.....	Prisoner's statement, R. A. F.
RIVER LYS-VIMY REGION.			
26th Protective Flight.....	Linselles .....	May 3.....	Prisoner's statement, R. A. F.
VIMY-BAPAUME REGION.			
221st "A" Flight.....	.....	April 6.....	Document, R. A. F.
268th "A" Flight.....	.....	April 12.....	Document, R. A. F.
MOREUIL-NOYON REGION.			
206th "A" Flight.....	Hangest .....	May 3.....	Machine shot down and prisoner's statement, R. A. F.
5th Protective Flight.....	Ham area.....	May 3.....	Prisoner's statement, R. A. F.

## AIRDROMES

(a) NEW AIRDROMES.			
Flanders Region.			
Menin .....	Sheds. ....	Hangars. ....	R. A. F. photo., May 4.
Halluin, N. E. ....	6 .....	13 .....	R. A. F. photo., May 2.
Halluin, E. ....	4 .....	3 .....	R. A. F. photo., May 2.
Moreuil-Noyon Region.			
Bonneuil (chateau) .....	.....	7.....	French photo., April 27.
(b) CHANGES IN ACCOMMODATION.			
Flanders.			
Heule.....	.....	+1 .....	R. A. F. photo., May 3.
Cuerne .....	+4 .....	+1 .....	R. A. F. photo., May 3.
River Lys-Vimy Region.			
Houplin.....	+1 .....	-2 .....	R. A. F. photo., May 2.
Château-du-Sart .....	.....	+10 .....	R. A. F. photo., May 3.
Seclin.....	.....	+6.....	R. A. F. photo., May 2.
Vimy-Bapaume Region.			
Aulnoy .....	.....	+2.....	R. A. F. photo., May 3.
Moreuil-Noyon Region.			
Bonneuil (farm).....	.....	-4.....	French photo., April 27.

## GIANT AIRPLANES

The following was obtained from two Alsatian deserters belonging to Giant Flight 501, stationed at Scheldewendecke, 18 km. south of Ghent.

This flight commanded by a Captain, possesses three airdromes: Bruxelles, Scheldewendecke and St. Dennis-Westrem. At present all six machines of the flight are at Scheldewendecke.

The effective strength for each machine is about 30 men as follows:

### 1. FLYING CREW:

- 1 Airplane Commander.
- 1 Officer Pilot.
- 1 N. C. O. Pilot.
- 4 Mechanics.
- 1 Mechanic who regulates the consumption of gasoline in such a way as to maintain the equilibrium of the machine.
- 1 Wireless Operator.

### 2. REPAIR CREW:

- 14 Mechanics.
- 2 Electricians.
- 3 Carpenters.
- 1 or 2 Saddlers.

All the machines of this flight are Lizenz, except the R-12, a Gotha. Orders have been given to abandon the construction of Gothas which gave difficulty in landing. The construction of the Lizenz is being pushed, especially at Staaken (near Berlin) and at Friedrichshafen.

GOtha BIPLANE :

Spread of 42 meters.  
Width of plane 4.5 meters.  
Length of machine 28-30 meters.  
Maximum speed without bombs, but with complete crew and full tanks (3,000 liters)—150 km.  
Maximum bomb load—2,250 kg.  
Maximum speed with full load—130 km.  
Maximum height without bombs—4,000 m.  
Maximum height with bombs—3,500 m.  
Landing speed—60 km.  
Maximum length of flight—9 hours.  
4 Benz motors—260 h. p.  
2 Daimler motors—160 h. p.  
Weight without fuel, crew, or bombs—9,200 kg.

The motors are divided as follows : the two Daimler in front of the body of the machine with a single screw for the two motors ; the four Benz, two at each side in a cabin placed between the two planes at three meters from fuselage.

The machine carries 50, 100 and 300 kg. bombs ; two of 300 kg., or four of 100 kg., fixed on the lower plane between the motor cabins and the fuselage ; the others of 50 kg. fixed in the fuselage.

LIZENZ BIPLANÉ :

Spread 42-45 meters.  
Width plane 4.5 meters.  
Length 30 meters.  
Maximum speed without bombs 150 km.  
Maximum speed with bombs 130 km.  
Maximum bomb load 2,250 kg.  
Maximum altitude without bombs 4,000 m.  
Maximum altitude with bombs 3,500 m.  
Maximum climbing rate without bombs, 150 m. per minute.  
Maximum climbing rate with bombs 100 m. per minute.  
Landing speed less than that of Gotha.  
Gasoline capacity 3,000 liters.  
Maximum length of flight 9 hours.

The four Daimler motors were replaced four weeks ago by 300 H. P. Maybach motors constructed at Friedrichshafen. They expect to replace these by 600 H. P. motors now being constructed. The motors are placed two at each side in a cabin located between two planes at 3.5 meters from fuselage.

The Lizenz giant airplane can carry two 1,000 kg. and a few 50 kg. bombs, or make up the load from 300, 100 and 50 kg. bombs.

The Lizenz is armed with four machine guns, one in front, and three at the junction of the fuselage with the planes, two above and one underneath. English aviators have attacked these machines on the side and from the rear, although they are more vulnerable from the front, as the machine gun in front is worked with difficulty, for the pilot who operates it has many other duties. The other three guns protect very efficiently the rear, the sides, the top and the bottom of the plane.

For departing and landing, these Giant machines require flat and continuous ground. The many accidents due to rough landing places have led the Germans to build a large cement platform at Scheldewendecke, which is at present the only field of departure for these giant machines.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### MOREUIL-NOYON REGION

223d "A" Flight ..... May 4..... Machine shot down, R. A. F. Last identified in Laon area February, 1918.

### VERDUN REGION

44th Reconnaissance Flight Jametz.. May 3..... Prisoner's statement, French. Last identified at Thonnelles-Pres (same region), November, 1917.

## IDENTIFICATIONS

### MOREUIL-NOYON REGION

203d "A" Flight..... May 4..... Machine shot down, R. A. F.

## AIRDROMES

(R. A. F., May 6, 1918.)

Region	Confirmed.		Removeu.	
	Sheds.	Hangars.	Sheds.	Hangars.
River Lys-Vimy .....	8	17	..	..
Bapaume-Moreuil .....	..	55	..	12
Moreuil-Noyon .....	..	55	..	24

## ACTIVITY

### AMERICAN :

On May 7 two German planes were driven down out of control. One of our machines is missing.

## EMPLOYMENT OF HOSTILE AVIATION DURING THE RECENT OPERATIONS

FROM INFORMATION FURNISHED BY THE FRENCH AND BRITISH ARMIES : FROM SUPPLEMENT TO FRENCH  
IID ARMY BULLETIN, MAY 5, 1918.

The extent of participation of German aviation in the offensive of March 21 is still indefinite. However, it is now certain that German aviation did not show the strength which might have been expected. This statement is the more noteworthy as concurring reports have confirmed the great effort made by Germany in 1917 to increase the air forces, particularly in the pursuit (50 new squadrons) and bombing classes. The unfavorable atmospheric conditions do not sufficiently explain the secondary role which German aviation played during the recent offensive. The compilation of information gathered up to the present permits the following observations to be made :

1. The replacement of machines met with difficulty. Reconnaissance and artillery observation flights, which should have had six to nine machines to each flight, received only partial replacements. Flights which had been engaged were replenished at the expense of neighboring flights. Pursuit flights, which should have had 18 machines, had only 12 or 14. It is also reported that the average time for replacement of destroyed machines, which was formerly three days, is now six to eight.

2. Trouble was also experienced in recruiting personnel. The insufficient training of a large number of pilots before being sent to the front is reported from a number of sources.

Captured orders (examples of which are given below) and other information indicate the following characteristics of the employment of the German air forces :

### BOMBING AVIATION

There has been systematic activity in execution of the simple plan of bombing important points in rear of the Allied lines, especially railroad stations, communication centers and aviation fields. These bombardments always took place at night. On the night of April 12-13 giant machines flew over the region of Soissons-Compiègne-Laon.

### PURSUIT AVIATION

Use was not made of the expected mass formations which the instructions of 1917 seemed to contemplate. The enemy employed either patrols of two or three good pursuit planes, or patrols of five, six, or more, which formed a barrage and did not seek to fight, but seemed especially intended to prevent passage beyond their own lines.

The frequency of attacks on balloons was marked. In these attacks the element of surprise was obtained by maneuvers intended to attract attention to points other than the real objective, by making use of clouds, by taking advantage of the sun and by waiting till the balloon was being moved back to its bed. (Two balloons burned are considered the equivalent of three planes shot down.)

### PROTECTION AVIATION

The old protection flights seem to have taken the more effective part in the battle by flying at a low altitude and attacking troops with machine guns. On this account the name "Battle Flight" (*Schlachtstaffel*) was given to those which had this mission. This change of designation, however, does not yet seem to have been officially sanctioned.

OBSERVATION AVIATION

There were few long distance reconnaissances. Observation seems to have been largely confined to the first lines. The orders given below show the care and precision demanded in information reports from this kind of aviation.

TRANSLATIONS OF THE CAPTURED GERMAN ORDERS REFERRED TO ABOVE FOLLOW :

No. 1.

4TH RES. DIV.  
No. 1,244  
SECRET

DIVISIONAL HEADQUARTERS  
APRIL 6, 1918.

Information of the enemy. Description of the terrain and situation of the enemy in the triangle Givenchy, Festubert, Gorre (See 4th Res. Div., No. 1217 and the 1/10,000 map of April 1, 1918).

1. Airplane reconnaissances made at low altitude April 6, 1918.

(a) The terrain S. W. of Festubert (map squares 4113, 4114 and 4115) does not seem swampy, although there is water in the shell holes.

(b) The trenches on both sides of the Festubert-Gorre road (sector of the 362d Infantry) contain little or no water. S. of the road, between squares 4114 g and 4015 g, there are about 15 trenches running N. and S. which are from one to two meters wide and have water in them.

(c) In the wood (square 4115), E. of the River Louanne, there is a low and dense undergrowth. W. of the river there is a thick growth of large trees.

(d) To cross the River Louanne (which is about four meters deep and from eight to ten meters wide at the top of its banks, running N. and S. one km. in front of Gorre) bridges will be necessary.

2. In our attack, our three regiments will encounter at most six companies in advance, and two battalions in reserve in Festubert and Givenchy. One battalion, of the divisional reserve, is S. of the canal from La Basse to Le Preol. Our powerful artillery fire will prevent it from taking part in the fight for Festubert and Givenchy. The troops are elements of the division which, after having been engaged in the Somme, served in Flanders and at Cambrai ; in March, 1918, it was declared by prisoners to be a division "good for guarding quiet sectors", which is to say that it is below medium quality.

The aviators state that the enemy held his trenches in normal strength this morning.

Distribution down to  
platoon commanders.

(Signed) MULTER.

No. 2.

When the aviator fires a white flare, spread out the panel cloths, light the trench candles, and fire illuminating cartridges toward the ground.

NOTE.—See also DIVISIONAL ORDER FOR AIR RECONNAISSANCE published on April 19, 1918, in *Summary of Information* No. 19 and in *Air Intelligence Bulletin*.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### VIMY-BAPAUME REGION

14th Reconnaissance Flight ..... May 3 ..... Machine shot down N. of Arras, R. A. F. Last identified in Verdun region, March 18.

### ALSACE

218th Reconnaissance Flight ..... April 29 ..... Prisoners from machine shot down, R. A. F., claimed to belong to this flight. Now believed his statements are doubtful, and that this flight is still at Schiestadt. See S. A. I. 5.

### BALKAN FRONT

25th Pursuit Flight ..... April 26 ..... Machine shot down, R. A. F. Last reported by a prisoner to be in the Verdun region, March 18.

## IDENTIFICATIONS

### VIMY-BAPAUME REGION

233d Reconnaissance Flight ..... Cambrai area ..... April 7 ..... Document, R. A. F.

### LAON REGION

216th Reconnaissance Flight ..... Laon area ..... March 19 ..... Document, R. A. F.

## AIRDROMES

(R. A. F. May 7, 1918).

Region.	Confirmed		Removed	
	Sheds.	Hangars.	Sheds.	Hangars.
Flanders .....	..	3	..	..
Vimy-Bapaume .....	7	..	..	19
Bapaume-Moreuil .....	..	4	..	..

## ORGANIZATION AND DUTIES OF RECONNAISSANCE FLIGHTS

From information gained from quotations from an official German document dated January 10, 1918, as published in R. A. F. Summary of Air Intelligence, May 7, 1918.

### CHANGE OF DESIGNATION

From March 1, 1918, the term "A" flight (*Fliegerabteilung "A"*) is no longer to be used, these units being designated as "reconnaissance flights" (*Fliegerabteilungen*). Units engaged on reconnaissance and artillery work numbered over 200 had retained the designation as "A" flights, whereas the reconnaissance units, numbered from one upwards, were called "reconnaissance flights," although the two classes were identical in composition and duties.

### STRENGTH

On main battle fronts, every division is allotted at least one flight of six or nine machines to carry out the duties of artillery and infantry airplanes in the divisional sector. This confirms various prisoners' statements as to the raising of the establishment of reconnaissance units from six to nine machines.

### DUTIES

Divisional flights are employed on photography only in exceptional cases to photograph special targets, their principal duty being artillery work. The photography of areas is carried out by flights attached to Corps, or by special machines doing mosaic photography. For work with super-heavy artillery, it may be necessary to place a flight of machines fitted with combined wireless receiving and transmitting apparatus directed under Army H. Q.

## INTERROGATION OF PRISONERS

44TH RECONNAISSANCE FLIGHT: FROM FRENCH IID ARMY BULLETIN, MAY 5, 1918

A machine of the 44th Reconnaissance Flight was brought down intact on May 3, in the region of Belrain; the observer, an officer, and pilot, a N. C. O., were made prisoners. The machine is a Rumpler C-7, which differs from the C-6, in that, it has a high pressure 200 h. p. Maybach motor. It is equipped with two machine guns and marked with a Greek cross. The machine had risen to an altitude of 7,000 meters. Both passengers wore oxygen generators, and the observer had a mask and electrically heated suit.

The flight is composed of six Rumpler machines, and has a personnel for seven. It is located at the Jametz airdrome, and does all the long distance reconnaissance work for the Vth Army, operating mostly in the region of Bar-le-Duc—Saint-Dizier. The machine was attacked and brought down as the observer was preparing to photograph the field of Belrain, which he believed to be Bulainville.

The pilot has belonged to this flight for one year and a half, during which time it has remained in the same region. It had one observer killed by French anti-aircraft fire in May, 1917, and one machine brought down in flames in the region of Ornes in June, 1917. It is attached to the East Maas group, but

the air forces of the East Maas group and the West Maas group are united under the command of Captain Christen whose headquarters are at Remoiville near Louppy.

The pilot believed that several flights belonging to the Vth Army recently left the region, though he thought the 228th Reconnaissance Flight was still at Marville. (Identified at Etrécourt, S. E. of Bapaume, on 26 April, 1918, according to R. A. F. Summary, 3 May, 1918). He identified the location of the 272d, 274th, and 278th Reconnaissance Flights.

Protective flights have not been identified in his region for five months, yet the pilot declared that all observation flights which cross the lines have a protective flight attached.

The pilot is acquainted with the 23d Pursuit Flight which recently left Jametz. Among its pilots was Kissenberg with 24 victories to his credit. He knew the fields of Stenay, Marville, Jametz and Longuyon, and believed all occupied at present. He had heard of a new light Maybach motor, but did not know any particulars concerning it.

#### 276TH RECONNAISSANCE FLIGHT: FROM 2D BUREAU, FRENCH VIIIth ARMY

Private Hans Buck was born at Hanover on July 14, 1898, and attended a normal school for teachers. In November, 1916, he was attached to the 9th Jaeger Battalion at Ratzeburg, near Lubeck. In May, 1917, he volunteered for the pilots' school at Breslau, attached to 11th Training Squadron (*Flieger Ersatz Abteilung No. 11*). In March, 1918, he was assigned to the Training Squadron and from there was sent to the Aviation Park of Army A at Strasbourg. On March 28, he was assigned to the 276th Reconnaissance Flight at Buhl as a pilot.

The prisoner left Buhl at about 10 a. m., May 3, as a pilot for Lieut. Scharf, who was charged with a photographic reconnaissance in the region of Epinal. At an altitude of 4,500 meters, the machine, without any apparent cause, started to spin downward, and the pilot could not get it straightened out again; in landing, the machine struck a railroad embankment, killing the observer and seriously wounding the pilot.

The flight has nine machines, of which one or two are kept in reserve. These are Rumplers and D. F. W.s of known types, and one Hanover of a new model. The nine observers are officers whereas the personnel of pilots is made up of two officers, and nine N. C. O.s and privates.

This flight is directly attached to Army A and is charged with long distance reconnaissance and photography, operating over the area extending from Luneville to Gerardmer, and covering a depth reaching Langres. It has not had losses since the end of March. The prisoner states that the 70th and 78th Pursuit Flights are also located at Buhl. The former is a new formation, commanded by Lieut. Col. Schlieter, and arrived at the beginning of March. The latter is a recent arrival. Both of these flights are equipped with 12 D.5 Albatros machines. He also states there is a reconnaissance flight at Lorquin and that the 10th Reconnaissance Flight had recently arrived at Schlestadt.

Capt. Genée, at Mutzig, is the aviation commander of Army A. Capt. Preu commands the 276th Reconnaissance Flight. The observers are Lieut. Hagemann (photograph officer), Lieut. Sack and Lieut. Drumm, Lieut. Bockert, Vice Sergeant Majors Stephan and Schulze, and Private Holler, are pilots.

#### THE MANZELL-FRIEDRICHSHAFEN FIRE

Shortly after 10 o'clock, on the evening of April 13, a fire broke out in the airplane works at Manzell, about three kilometers west, of Friedrichshafen. The fire was accompanied by explosions at frequent intervals throughout the night, and it was not until 4 o'clock on the following morning that the blaze was extinguished. According to reliable information the following were destroyed: three "halles", two of which have been constructed since the outbreak of war; contents of the "halles", including six new Gotha airplanes and seven new Gotha hydroplanes; large reservoirs, containing quantities of oil and gasoline; and several thousand aerial incendiary bombs.

The feeling seems to be prevalent among the Swiss papers that the destruction in the Manzell works was caused by Allied bombing, but as neither the British nor French communiques mention such a raid, the conclusion is reached that the fire was the result of an explosion among the gasoline reservoirs, from causes as yet undetermined.

#### RAID ON THIONVILLE

R. A. F. SUMMARY OF AIR INTELLIGENCE MAY 4, 1918.

On May 2, and again on May 3, British machines carried out a raid over Thionville. In all more than two tons of bombs were dropped. Bursts were observed on the barracks, railroad station, and sidings. A direct hit was obtained on the Carlshutte works, where a fire was started. A number of photographs were taken. Enemy machines were sighted, but did not attack. Anti-aircraft fire during the raid was moderate. All machines returned safely.

#### SUMMARY OF OFFICIAL COMMUNIQUE

MAY 9, 1918.

##### FRENCH.

(May 9, 1918, 11 a. m.) Lively artillery actions occurred at several points N. and S. of the AVRE.

A hostile patrol which attempted to reach our lines in the region of LA CHAPELLE-ST. AIGNAN was repulsed. There is nothing to report from the rest of the front.

(May 9, 1918, 9.31 p. m.) There is nothing to report beyond marked activity by the artillery of both sides along the front from HAILLES to MONTDIDIER.

##### BRITISH.

(May 8, 1918, evening, continued.) AVIATION. On May 7 the rain again made all aerial activity impossible until 5.00 p.m. The weather having suddenly cleared, our machines went up on their reconnaissance and bombardment missions. The dropped 400 bombs on various objectives along the entire front.

In the course of air fights 12 hostile airplanes were brought down, eight of them in an important combat near DOUAI. A German observation balloon was set on fire. All our machines returned.

(May 9, 1918, 10.15 a. m.) In the course of successful counter-attacks yesterday evening by French and British troops in the LA CLYTTÉ-VOORMEZELE Sector, the enemy was driven from the elements of the Allied line into which he had penetrated in the morning. We have re-established our original positions and taken several prisoners. This morning

the enemy again attacked N. of KEMMEL HILL and at one point slightly forced back our front. The fighting continues. The operation yesterday morning was carried out by troops belonging to two German divisions. The fire of our artillery as well as the infantry fighting during the attack and counter-attack caused them heavy losses.

In local engagements at BUCQUOY we took 30 prisoners.

We made other advances during the night between the SOMME and the ANCRE, improving our positions in this sector and capturing several prisoners. Hostile raids were repulsed in the neighborhood of the ANCRE and of MERRIS.

Hostile artillery showed considerable activity during the night in the ALBERT Sector.

(May 9, 1918, evening.) This morning, at the conclusion of the operation in the sector LA CLYTTE-VOORMEZEELE, the French and British positions were completely re-established. Following the activity of his artillery, already reported, the enemy early this morning attempted two attacks in the neighborhood of ALBERT and BOUZINCOURT. At the latter point the attack was broken up by our artillery and machine gun fire and did not reach our trenches. After heavy losses the enemy succeeded in obtaining a foothold in our positions at ALBERT along a front of about 150 yards.

Except for activity by the artillery of both sides in various sectors, there is nothing further to report from the remainder of the British front.

#### ITALIAN.

(May 9, 1918, 4.45 p. m.) Artillery activity of both sides was more lively at some points in the ASIAGO basin, on the left bank of the BRENTA and in the MASERADA district. Hostile troop movement at ROANA, on MTE. SISEMOL and in the COL CAPRILE-COL BERRETTA sector was hindered by our fire. Patrol encounters took place near PENNAR, on the ASIAGO Plateau and along the PIAVE, in the neighborhood of FENER. British aviators bombed the aviation ground at MOTTA DI LIVENZA.

#### GERMAN.

(May 9, 1918, 2.20 p. m.) WEST FRONT. Artillery activity continued lively all day between YPRES and BAILLEUL. Our local attacks S. of LAKE DIKKEBUSCH were entirely successful. Rhenish and Baden troops took by assault the strongly fortified lines of the enemy along the E. bank of the VYVERBEEK on a front of two kilometers. They there appear to have met an attack by French and British troops which they dispersed. The hostile attack came to full development only on both sides of the RENINGHELST-KEMMEL Road, where it also was driven back. Counter-attacks against our newly won positions were repulsed. We took 675 prisoners from six French and two British divisions, which suffered very heavy losses.

In the course of repelling British attacks along the S. bank of the Lys, near BUCQUOY and S. of ALBERT we took prisoners. In yesterday's unsuccessful night attack by Australian troops along the CORBIE-BRAY Road 45 prisoners including four officers, remained in our hands. N. of the LUCE and on the W. bank of the AVRE artillery fire continued active.

Successful reconnaissances took place at several points on the rest of the front.

AVIATION. During the last three days the enemy lost 37 airplanes in the course of air flights and through our anti-aircraft defence. 1st Lt. Schleich yesterday, brought down three hostile machines and thereby achieved his 27th and 28th air victories.

EAST. Ukraine. Advancing along the N. coast of the sea of AZOFF, we have reached the mouth of the DON and occupied ROSTOFF. Negotiations for determining a boundary line will shortly begin.

(May 9, 1918, 8.32 p. m.) There is nothing new to report from the theaters of war.

#### AUSTRIAN.

(May 9, 1918, 2.27 p. m.) Artillery fire of both sides continued active yesterday along the PIAVE. Italian reconnaissances were frustrated at several points on the mountain front.

SUMMARY OF AIR INFORMATION

CHANGES IN LOCATION OF UNITS

MOREUIL-NOYON REGION			
5th Pursuit Squadron .....	Ham area.....	21 Apr. '18	Prisoner's statement, R. A. F. Not previously identified.
LORRAINE.			
70th Pursuit Flight .....	Buhl .....	Mar. 1918....	Prisoner's statement, French. New unit.
78th Pursuit Flight .....	Buhl .....	Recently ....	Prisoner's statement, French. Last identified by British in the Peronne area, 22 Apr. '18.

IDENTIFICATIONS

Lys-VIMY REGION.			
19th Reconnaissance Flight ..	Lille area.....	12 Apr. '18...	Document, R. A. F.
MOREUIL-NOYON REGION.			
7th Protective Flight .....	Guisse area.....	12 Apr. '18...	Document, R. A. F.
LORRAINE.			
276th Reconnaissance Flight .	Buhl .....	3 May '18 ....	Prisoner's statement, French.

AIRDROMES

Region	(R. A. F., 8 May 18)			
	Confirmed		Removed	
	Sheds	Hangars	Sheds	Hangars
Bapaume-Moreuil .....	..	6	..	..
Moreuil-Noyon .....	..	6	..	1

ORGANIZATION AND DUTIES OF PURSUIT SQUADRONS

Information obtained from a prisoner of the 35th Pursuit Flight, as published in R. A. F. Summary of Air Intelligence, May 3, 1918. Confirms previous information.

ORGANIZATION.

These squadrons generally consist of four flights, the commander having both tactical and administrative control over the units. One reason for forming such squadrons was the necessity for an efficient system of line patrolling, lack of which had evoked numerous complaints from reconnaissance units and ground troops. The composition of these squadrons is believed to be permanent, but no definite information is available as to the possibilities of flights being transferred.

DUTIES OF 8TH PURSUIT SQUADRON.

This squadron patrols the lines between Albert and Hebuterne for the XVIIth German Army. The system of patrolling is as follows:

If there is no activity one pursuit flight patrols for one hour and a half, and then returns to its airdrome. Another flight starts out as soon as the first returns. If there is much activity the first flight remains on patrol until relieved by the second, which leaves its airdrome if the first flight has not returned within one hour and three-quarters after starting. Pilots usually carry out one patrol each day.

THE GREEK CROSS ON GERMAN AIRPLANES

FROM BULLETIN OF FRENCH IIIRD ARMY, MAY 4, 1918.

According to the declarations of two prisoners belonging, respectively, to a combat flight and a bombing flight, a general order was published early in March for all flights to substitute the Greek cross for the Maltese cross. The cause of the change is not known, but the modification is only in the form, no change being made as to number, dimensions, or positions.

When the order was first put into execution it was found that the new insignia led to confusion, of which three German aviators are said to have been victims. As a consequence the Chief of Aviation of the VII Army ordered the flights under his command to discontinue the change. Numerous reports were sent to the Aviation Section at General Headquarters, and on April 17, when the prisoners were taken, there was a feeling of certainty that the order would be revoked, and that the Maltese cross would again be used.

USE OF PIGEONS

An informer reports that airplanes of the German Navy carry a number of pigeons, which are released in case of an enforced landing in order to notify the airdrome to which the machine belongs.

DEVICE FOR AIRPLANE DESTRUCTION

According to British information, the Germans have recently begun using a clockwork bomb to destroy airplanes brought down within Allied lines. The apparatus is rectangular in form, and the mechanism is said to delay the explosion for two or three hours.



**HISTORY OF GIANT AIRPLANE****INFORMATION OBTAINED FROM TWO ALSATIAN DESERTERS FROM THE GERMAN ARMY.**

Early in 1915, several factories, among which were the Siemens-Schuckert and the Gotha-Waggon-Fabrik, began the construction of giant airplanes. The Siemens-Schuckert factories turned out the first machine to give results. It was similar to the Russian Sykorski type, with three motors placed in front of the fuselage, equilibrium being maintained by loading the rear of the fuselage with ballast. Three such machines were sent to the Russian front, but their use failed to justify expectations, due in part to poor climbing powers.

The House of Siemens-Schuckert tried in vain to improve its product. The three accepted machines were used only as training planes, though each of them cost about 500,000 marks. At the beginning of September, 1916, the Gotha-Waggon-Fabrik produced a machine which gave satisfaction. Because of its success there was a decrease in Zeppelin construction, and the factories thus released were altered to suit the manufacture of giant machines.

At the end of 1915, the 501st flight was organized, with its station at Wilna. Captain Bentevegni commanded the flight. The reserve depot was located at Doberitz, near Berlin. The flight is now located at Scheldewendeke, and is used for bombing London. The 500th flight has been organized at Custinne, southeast of Dinant, and it was expected that it would be prepared to undertake the duty of bombing Paris by the first of May.

So far as is known there have been 39 giant airplanes of two types, the Gotha and the Lizenz.

1-5, 6, 9-12, and 14, Gothas.

13, and 25-39, Lizenz.

7 and 8, unknown.

15-24 are not accounted for since they are not attached to any formation or school, and therefore have probably been destroyed.

1-3, and 9 are in use at the Doberitz-Berlin pilots' school.

4, refused by the Government.

5, no longer in existence.

6, 11 and 14, destroyed in trial flights; 11, at Staaken, and 14, in flight from Berlin to Halberstadt

10, burned at Wilna while landing.

27, destroyed at Ghistelle while returning from raid on London.

36, location unknown.

12, 13, 25, 26, 33 and 39 belong to flight 501.

28 belongs to flight 500.

29-32, 34, 35, 37, and 38 are under construction; the first six destined for flight 500.

**EFFECT OF AIR OPÉRATIONS****FROM ROYAL AIR FORCE COMMUNIQUE, No.4.**

For the period of April 22 to 28, inclusive, the British claim officially, 34 German airplanes brought down and ten driven down out of control. In addition ten were brought down by anti-aircraft and infantry fire. Eight British machines are missing. Approximately 87 tons of bombs were dropped and 1,898 photographs were taken.

**FROM R. A. F. SUMMARY OF AIR INTELLIGENCE, MAY 3, 1918.**

A prisoner of the 93rd Res. Inf. Regt. states that his regiment has suffered very heavily. When marching along the Amiens road to the front on April 21, bombs were dropped on them by British airmen. Two mounted officers and three sergeant majors were killed, in addition to casualties among the men.

**FROM R. A. F. SUMMARY OF AIR INTELLIGENCE, MAY 3, 1918.**

A deserter who surrendered on March 24, states that a large store of clothing and equipment at Topoljani, Balkans, was destroyed during the first week of March, eight Bulgarian soldiers being killed.

NOTE.—Topoljani was raided by British airplanes on March 3 and 4.

**FROM OFFICIAL ITALIAN REPORTS.**

During March 1918, Italian and Allied aviators on the Italian front brought down 20 airplanes and two observation balloons, in addition to three airplanes destroyed by the Italian air-craft batteries. The Italians made 11 bombing raids with airplanes which dropped a total of 23,357 kg. of explosives; thirteen bombing raids were made by dirigibles which dropped a total of 13,150 kg. of explosives.

From the beginning of the campaign to March 31, 1918, 346 hostile airplanes have been brought down on the Italian front, 327 by aviators, and 19 by the anti-aircraft batteries. During this time all bombing raids made by airplanes have dropped a total of 428 tons of explosives, and the 64 bombing raids made by dirigibles have dropped a total of 63 tons of explosives.

**SUMMARY OF OFFICIAL COMMUNIQUE**

MAY 10, 1918.

**FRENCH.**

(May 10, 1918, 11 a. m.) After intense and brief artillery preparation yesterday afternoon our troops captured the fort of GRIVESNES, an important part of which had remained in the possession of the Germans. In the course of this operation we took 250 prisoners of which four are officers and much materiel. In spite of lively reaction by the hostile artillery and reconnoitering parties which attempted to reach our new line our infantry maintained the conquered positions and organized them.

On the right bank of the Ailette, in CHAMPAGNE, in the region of MASSIGES and N. of RHEIMS, and in LORRAINE in Ailly Woods, we carried out several successful minor operations or repulsed hostile raids in the course of which we took 36 prisoners including one officer.

## SUMMARY OF AIR INFORMATION, NO. 10, MAY 11, 1918.

AVIATION. Yesterday during the day Lt. Fonck in the course of two patrols brought down six hostile biplanes the first two in ten seconds, the third five minutes later and the three last in course of his last patrol.

(May 10, 1918, 9 p. m.) There is nothing to report beyond fairly heavy artillery combats in the region of GRIVESNES and between LASSIGNY and NOYON.

### BRITISH.

(May 9, 1918, 8.25 p. m., continued.) AVIATION. On May 8 the weather was fine but aerial activity remained inconsiderable S. of ALBERT on account of the thick fog which hung over the lines. In the northern sector of the front machines were very actively employed in reconnaissances, photographic missions, artillery work and bombardments. Ten tons of projectiles were dropped on LE CATEAU, CAMBRAI, BAPAUME, and on the docks and mole of ZEEBRUGE. In the northern sector air fights were very violent during the whole day. Twenty-two hostile machines were brought down and seven forced to land disabled. One other was shot down by our infantry machine guns. Seven of our airplanes are missing.

On account of the fog few airplanes were able to go up during the night but we nevertheless dropped one ton of bombs on the railway stations at DOUAI and MARCOING. All our machines returned.

(May 10, 1918, 10.15 a. m.) The element of our first line trenches captured by the enemy in the course of his attack yesterday morning was retaken by our troops during the evening. We captured some prisoners.

German artillery was active last night in the valleys of the SOMME and the ANCRE and on various points on the Lys battle front.

(May 10, evening.) Local fighting occurred in the vicinity of AVELUY Wood, N. of ALBERT. The German artillery was active at various points along the front, especially in the VIMY and ROBECQ sectors and S. of DIKKEBUSH. Otherwise there is nothing to report.

### ITALIAN.

(May 10, 1918, 4.44 p. m.) Patrol actions took place along the mountain front and artillery duels were somewhat more lively in the ADAMELLO area, on the northern slopes of Mt. ALTISSIMO and in the eastern sector of the ASIAGO Plateau. In the BRENTA and SEREN valleys and at the mouth of the PIAVE columns and troop movements of the enemy came under our fire. Aircraft activity was intense over the fighting lines and back areas; four hostile machines were brought down and one forced to land.

### GERMAN.

(May 10, 1918, 2.10 p. m.) WEST FRONT. Artillery activity on the battle fronts was marked during the day only in the region of KEMMEL HILL, on both sides of the LUCE and on the W. bank of the AVRE. Heavy increase in fire in these sectors was followed by hostile attacks. In the course of repelling these attacks and of reconnaissance activity we captured prisoners. During the evening and night artillery fighting was renewed at many points between the YSER and the OISE. Activity on the rest of the front remained limited to reconnaissance combats.

There is nothing new to report from the other theaters of war.

(May 10, 1918, 8.34 p. m.) A British local attack N. of ALBERT was repulsed. A French assault in the APREMONT Forest also broke down.

### AUSTRIAN.

(May 10, 1918, 2.13 p. m.) There is nothing of importance to report.

(May 10, 1918, 9.01 p. m.) There is nothing special to report.

SUMMARY OF AIR INFORMATION

CHANGES IN LOCATION OF UNITS

RIVER LYS—VIMY REGION.			
14th Reconnaissance Flight.....	Capelle .....	8 May, 18 .....	Machine shot down, R. A. F. Last identified in Vimy-Bapaume region, 3 May, 18.
224th Reconnaissance Flight.....	Carvin area.....	11 April, 18 .....	Document, R. A. F. Last identified at Bruille (Vimy-Bapaume region), 28 Mars, 18.
BAPAUME—MOREUIL REGION.			
238th Reconnaissance Flight.....	.....	2 April, 18.....	Document, R. A. F. Last identified at Wynghe (Flanders), 17 April, 18.

AIRDROMES

(R. A. F., 9 May, 18.)

Region.	Confirmed.		Removed.	
	Sheds.	Hangars.	Sheds.	Hangars.
Vimy-Bapaume .....	?	?	..	..
Bapaume-Moreuil .....	..	..	..	1

GERMAN AIR FORCES, MAY 3-9, INCLUSIVE

Region.	FLIGHTS BY CLASS.								Total
	Pursuit.		Bombing.		Protective.		Reconnaissance.		
	Change.	Total.	Change.	Total.	Change.	Total.	Change.	Total.	
Flanders .....	..	8	..	6	—1	1	—1	8	23
River Lys-Vimy .....	+2	13	..	3	+3	7	+3	16	39
Vimy-Bapaume .....	+1	7	—3	4	+1	8	—1	22	41
Bapaume-Moreuil .....	—1	10	..	..	—2	5	+2	17	32
Moreuil-Noyon .....	..	11	+3	6	+2	8	+2	22	47
Laon .....	..	9	..	3	—1	4	—2	24	40
Rheims .....	—1	1	..	..	..	..	..	6	7
Champagne .....	..	4	..	1	..	..	..	7	12
Verdun .....	..	2	..	..	..	..	—3	8	10
Woevre .....	..	3	—1	..	..	1	..	7	11
Lorraine .....	+2	2	..	..	..	..	..	6	8
Alsace .....	..	1	..	..	..	..	+1	9	10
Exterior Fronts .....	+1	2	..	..	—1	..	—1	26	28
Interior .....	..	..	..	..	..	..	..	2	2
Not located .....	—1	3	+1	1	..	4	..	21	29
Total flights .....	+3	76	..	24	+1	38	..	201	339
Total machines.....	..	1,368	..	288	..	456	..	1,809	3,921

NOTE.—The increase of 4 over the total number of flights reported May 2, is accounted for by the identification of the 49th, 59th and 70th Pursuit Flights and the 36th Protective Flight, which are new units.  
The number of machines is based on a strength of 18, 12, 12 and 9 respectively for pursuit, bombing, protective, and reconnaissance flights. However, few flights have their authorized number of machines.

AIRDROMES.

Region.	Confirmed.		Removed.	
	Sheds.	Hangars.	Sheds.	Hangars.
Flanders .....	14	37	..	..
River Lys-Vimy .....	9	33	..	2
Vimy-Bapaume .....	9	4	..	19
Bapaume-Moreuil .....	..	65	..	13
Moreuil-Noyon .....	..	68	..	29
Total .....	32	207	..	63

EFFECT OF AIR OPERATIONS

FROM R. A. F. SUMMARY OF AIR INTELLIGENCE.

The following is an extract from the diary of a man belonging to the 478th Inf. Regt., 243d Div., which at the time was fighting in the Moreuil area:—  
“April 1st, 1918.—The English aviators attacked us with machine-guns and dropped bombs on us. Fifteen men were killed and many wounded in the 253d Regiment. Amongst them Aug. Strobel, Fleischer, Rolz and Ulzhofer. The company has shrunk to 30 men.”  
“April 2d, 1918.—The enemy bombarded our positions the whole day, directed by aeroplane observation. Our artillery and aviators are hardly to be seen, which is bad for us. The enemy aviators come down to within 10 meters and can therefore see every movement on our part.”

# OUTLINE OF INFORMATION RECEIVED.

A number of articles from different sources bring out the following points :

1. The Germans are fully impressed with the importance of low flying machines for delivering fire against ground troops during battle.
2. Instructions to German troops show that the Higher Command places reliance upon the effectiveness of fire from the ground against low flying machines.
3. Reports indicate that considerable attention is being paid in Germany to the development of armored airplanes, and of giant machines with large fuel, bomb, and gun capacity.

Conclusion : that the Germans will develop their air service with a view to providing units and types of machines particularly adapted for use against ground troops, both at the front and at concentration points in rear.

## EMPLOYMENT OF AIRCRAFT IN BATTLE

FROM BRITISH SUMMARY, MAY 9, 1918.

A captured order of the 228th Division, dated April 20, for the attack on Villers-Bretonneux on April 23, shows dispositions for the co-operation of aircraft in the infantry attack. A translation of an extract from this order is given below :—

“Par. 10—Aviation.

“A group of battle flights will support the attack with two flights along the Roman road and with two flights along the railway ; machines will appear over the battle field immediately after the attack has been launched.

“Enemy airplanes will be driven off by special pursuit machines.

“The 238th Reconnaissance Flight will receive orders regarding artillery machines from the artillery commander.

“From zero + 3 onwards, a contact patrol machine will follow the advance of the infantry. At zero + 30 and zero + 110, this machine will get into touch with the infantry ; troops will be specially instructed on this point—white flare signals.”

NOTE.—The road and railway referred to are apparently the Amiens—St. Quentin road and the Amiens—Nesle railway.

From the above document, it appears that battle flights (*i. e.*, protective flights) are organized in groups, one of which, during the attack on Villers-Bretonneux on April 23, co-operated in the battle with four flights.

From the fact that four battle flights were employed on a comparatively narrow front, it is probable that groups of battle flights are directly under the command of the Army and are allotted as required to formations (possibly Corps) engaged in active operations.

## RUMORS ABOUT NEW GERMAN MACHINES

### GIANT AIRPLANE.

From a source which has sometimes proved reliable, it is reported that giant airplanes of a new type have recently been sent to the Johannisthal Aviation School for trial. If the experiments prove satisfactory, squadrons of these giant airplanes will be established at Zeebrugge, Cuxhaven, Heligoland, Ostend, Gontrode, Engel and St. Dennis-Westrem. It is probable their use will be limited to long-distance bombing, with such objectives as Paris, London, and the places of debarkation and concentration of American troops. The machine is designed to carry two 37 mm. cannon and a crew of twelve men at a speed of 135 kilometers an hour.

### A NEW TYPE FOR LONG DISTANCE BOMBING.

From another source information has been received that the factories of the A. E. G. at Berlin are building a two-seater plane of a new type. Although the first trials have not proved very satisfactory there are expectations that it will yield good results. This machine is equipped with four motors, two of high power for usual uses, and two of lower power as a reserve. It is designed to remain 15 hours in the air and carry a ton of bombs at a speed of 150 kilometers an hour.

### MACHINE WITH A TURRET.

Through Italy it is learned that a Berlin engineer has patented a new type of airplane with a revolving turret mounted directly over the pilot's seat in the center between the wings. The base of the turret is mounted on ball bearings which permit it to revolve 360 degrees.

### A FLYING TANK.

From a reliable source in Holland information has been obtained that the Germans are developing an all-steel airplane, which will be used for action against infantry. It has a speed of 50 miles per hour developed by two 250 h. p. motors, and carries several 6 cm. guns. It is said to have been tried out very thoroughly.

## SUMMARY OF OFFICIAL COMMUNIQUE

MAY 11, 1918.

### FRENCH.

(May 11, 1918, 11 a. m.) Artillery fighting continued very active all night in the entire region of GRIVESNES and of MAILLY-RAINEVAL. Our troops made a raid N. of GRIVESNES in which they captured about 15 prisoners. In the course of a minor operation against the woods of MAREUIL, N. W. of ORVILLERS-SOREL we made an appreciable gain in terrain. Thirty-nine prisoners and several machine-guns were captured. A hostile counter-attack was completely broken up by our fire.

Our detachments made several other raids into the enemy's lines, particularly S. E. of MONTDIDIER, N. E. of THIESCOURT, in the sector of SAPIGNEULLES and in WOEVRE. We took prisoners and captured materiel.

There is nothing to report from the rest of the front.

(May 11, 1918, 9 p. m.) After very violent artillery preparation the Germans attacked our positions at GAUNE Wood, S. W. of MAILLY-RAINEVAL, with special assault troops. The enemy, who had at first succeeded in gaining foothold in the northern part of the wood owing to a favorable mist, was driven out by a brilliant counter-attack by our troops. We have entirely re-established our lines.

The Germans suffered very heavy losses and left about 100 unwounded prisoners in our hands, together with 15 machine-guns and other materiel.

There was vigorous artillery fire in the region of ORVILLERS-SOREL.

The day was calm on the rest of the front.

#### BRITISH.

(May 10, 1918, 10.20 p. m., continued.) AVIATION. On May 9 the clear atmosphere permitted our airplanes to work throughout the day. From morning until evening they carried out artillery observation, reconnaissances and photographic missions over the rear areas of the enemy.

Our bombing planes showed great activity on all fronts. More than 24 tons were dropped on various objectives particularly on the important railway stations at TOURNAI, DOUAI, MARCOING, CHAULNES and CAMBRAI, on the billets at CARVIN, PERONNE and CHIPILLY as well as on the docks at ZEEFRUGGE.

Air fights were almost uninterrupted and became violent towards evening. Twenty-seven German machines were shot down and 12 others forced to land disabled. A hostile observation balloon of the enemy was destroyed. Six of our machines are missing. During the night 4 1-2 tons of bombs were dropped on the docks and entrance to the canal at OSTENDE and 3 1-2 tons on PERONNE, CHAULNES and BAPAUME. All our machines returned.

(May 11, 1918, 9.45 a. m.) The French troops advanced their lines lightly yesterday evening N. E. of LOCRE and took several prisoners.

We made successful raids during the night W. of MERVILLE and captured prisoners and a machine-gun.

A German raid E. of YPRES was repulsed by our fire.

(May 11, 1918, evening.) An air raid attempted by the Germans near NEUVILLE-VITASSE was repulsed.

There is nothing further of importance to report.

#### ITALIAN.

(May 11, 1918, 5.10 p. m.) During the night of May 9-10, our infantry and assault detachments in the VALLARSA after lively fighting, captured a fortified post on MONTE CORNO, taking 100 prisoners, two guns, four machine-guns and much materiel. Several patrol encounters occurred during the day in the LAGHI Basin, in VAL LAGARINA and at other points, in the course of which we took prisoners. On the ASIAGO Plateau and in the region S. E. of the MONTELLO hostile artillery showed lively activity which was vigorously replied to by our own. Our air service continued active.

#### GERMAN.

(May 11, 1918, 2.20 p. m.) WEST FRONT. The artillery was intermittently active in the KEMMEL region. We carried out minor operations with success. French local attacks N. of KEMMEL and near LOCRE were repulsed.

On the battlefield of the SOMME several violent infantry combats occurred. British regiments after artillery preparation lasting several hours attacked our lines in AVELUY Woods but their assault waves suffered very heavy losses under our fire. Hostile night attacks against HANGARD were also unsuccessful. On the W. bank of the AVRE the French obtained a footing in GRIVESNES park but otherwise their attack at this point broke down with heavy losses.

Reconnaissance combats occurred along the OISE-AISNE Canal, in CHAMPAGNE, and N. E. of PONT-A-MOUSSON. The attack of a French battalion, re-enforced by pioneers and flame projectors, in the Forest of APREMONT was repulsed.

Severe losses were inflicted upon the Americans by heavy trench mortar bombardment W. of APREMONT and N. of PARROY.

MACEDONIAN FRONT: German assault troops penetrated French trenches N. W. of HAKOTWO and took prisoners.

(May 11, 1918, 8.34 p. m.) There were local artillery fights S. of the Lys and W. of the AVRE. Otherwise there is nothing of importance.

#### AUSTRIAN.

(May 11, 1918, 2.23 p. m.) Reconnoitering and aerial activity of both sides was again very lively yesterday on the Italian front.

#### TURKISH.

(May 10, 1918, 8.57 p. m.) PALESTINE FRONT. The artillery showed increased activity at some points on the front.

E. of the JERUSALEM-NABLUS road we dispersed a hostile reconnoitering detachment.

In the coast sector our aviators shot down two hostile captive balloons which fell to earth in flames.

The situation on the other fronts is unchanged.

(May 11, 1918, 9.08 p. m.) Between the coast and the JORDAN, there were occasional artillery duels. Otherwise there is nothing of importance to report.

# SUMMARY OF AIR INFORMATION

## NEW UNITS

### RIVER LYS-VIMY REGION.

3rd Mosaic Section ..... 8 May, 18..... Prisoner's statement, R. A. F.  
Not previously identified.

### WESTERN FRONT.

1st Mosaic Section ..... 8 May, 18 ..... Prisoner's statement, R. A. F.  
Not previously identified.

## IDENTIFICATIONS

### RIVER LYS-VIMY REGION.

9th Reconnaissance Flight..... Bersee..... 8 May, 18 ..... Prisoner's statement, R. A. F.

### VIMY-BAPAUME REGION.

18th Reconnaissance Flight ..... 8 May, 18 ..... Prisoner's statement, R. A. F.

### MOREUIL-NOYON REGION.

235th Reconnaissance Flight ..... 8 May, 18 ..... Prisoner's statement, R. A. F.

## AIRDROMES

Region.	Confirmed.		Removed.	
	Sheds.	Hangars.	Sheds.	Hangars
Flanders .....	3	4	..	1
River Lys-Vimy .....	..	30	..	..
Moreuil-Noyon .....	..	1	..	16

## MOSAIC SECTIONS

From information given by a prisoner, as published in R. A. F. Summary of Intelligence, May 10, 1918, the establishment of Mosaic sections is confirmed. These are numbered in an independent series. A section is equipped with six two-seater Rumplers (Maybach engines), and cinematograph cameras. The 1st, 3rd, and 6th Mosaic sections have been identified, the latter two being under the orders of the Vth Army and German G. H. Q., respectively.

## LONG DISTANCE RECONNAISSANCE FLIGHTS

From the same source as above. One, sometimes two, long distance reconnaissance flights are assigned to each army. These are not special formations, but are reconnaissance flights assigned this particular duty. They have nine machines, three of which are fitted with cinematograph cameras.

## GERMAN MORALE

FROM R. A. F. SUMMARY OF AIR INTELLIGENCE, MAY 10, 1918.

It has been particularly noticeable that airmen recently captured—scout pilots as well as crews of two-seater machines—have made no attempt to hide their conviction of German inferiority in the air, both as regards machines and personnel.

A few of the prisoners also attribute Allied superiority to greater numbers, and one officer states that his flight commander explained that if, at the moment, the British had the upper hand, it was due to greater numbers.

Some attempt thus appears to have been made to explain officially the reason for the present superiority of the Allies in the air.

## SUMMARY OF OFFICIAL COMMUNIQUE

MAY 12, 1918.

### BRITISH.

(May 11, 1918, 8.15 p. m.) A raid attempted by the enemy in the neighborhood of NEUVILLE-VITASSE was repulsed. There is nothing further to report.

AVIATION. On May 10 the low clouds and fog rendered all flights impossible up to 5 p. m., when the weather cleared on a part of the front. Aerial activity was very great at that point until night and more than 48 tons of bombs were dropped on PERONNE, BAPAUME, THIELET, DOUAY, ZEEBRUGGE and on the docks of BRUGES. German patrols were very active and repeatedly attacked our bombing planes. Eight hostile machines were brought down and six forced to land disabled. Nine of our machines are missing; one of our airplanes reported as missing on the 7th instant has since returned to its airdrome.

(May 12, 1918, 9.55 a. m.) The French carried out a successful local operation yesterday in which they improved their positions N. of the village of KEMMEL and captured more than 100 prisoners. We repulsed a strong hostile raid yesterday morning near the YPRES-COMINES Canal and took several prisoners.

In the course of patrol combats during the night near METEREN we captured several of the enemy and a machine-gun.

Hostile artillery was active last night and early this morning in the ANCRE sector, S. of ALBERT, and against our advanced positions, E. of Loos and S. of VOORMEEZEELE.

FRENCH.

(May 12, 1918, 12 noon.) Artillery fire of considerable violence occurred in the region W. of MAILLY-RAINEVAL. A German attack on our new positions N. W. of ORVILLERS-SOREL suffered complete check. Our fire inflicted heavy losses on the enemy, who left prisoners in our hands. Artillery fighting was active on the right bank of the MEUSE, in the sector of LES CAURIERS Woods—CHAMBRETTES. The night was quiet at all other points.

(May 12, 1918, 9 p. m.) The day was marked by rather intense artillery combat in the region S. of the AVRE. There were no infantry actions. There is nothing to report from the remainder of the front.

AVIATION. On May 10, despite bad weather, our pursuit squadrons were active. Two German machines were shot down and eight were badly damaged. On May 11 a German captive balloon was set afire by our pilots.

On May 10 and 11, our bombing planes dropped 7,000 kgs. of projectiles on the railroad stations, dumps and billets of the enemy, especially in the vicinity of NOYON, CHAUNY and FLAVY-LE-MARTEL. At the last named point several fires were noted.

GERMAN.

(May 12, 1918, 2.10 p. m.) WEST FRONT. Fighting on the battle fronts remained limited to local actions. N. of KEMMEL and along the S. bank of the Lys the enemy attacked after violent artillery preparation. At several points he made reconnaissances in force. N. of KEMMEL the hostile attack was broken up in our lines in hand-to-hand combat. His assault troops at all other points were repelled by our fire.

On the W. bank of the AVRE, S. W. of MAILLY, a raid made by us developed into violent fighting in which we took more than 30 prisoners. Between the AVRE and the OISE reconnaissance combats occurred at many points.

There is nothing of importance to report from the rest of the front.

AVIATION. During the last two days 19 hostile airplanes were shot down in air fights, 12 being brought down by the pursuit squadron formerly led by Captain Freiherr von Richthofen. Lieutenant Löwenhardt won his twentieth and twenty-first air victories.

(May 12, 1918, 8.31 p. m.) There is nothing new to report from the theaters of war.

ITALIAN.

(May 12, 1918, 4.45 p. m.) Patrol actions took place along the mountain front. One of our reconnoitering parties assaulted an advanced post on the COL DELL'ORSO, killing the garrison in the course of bayonet and hand grenade fighting and capturing a machine-gun.

Other patrols put a detachment of the enemy to flight in the SOLAROLO region, inflicting losses, and captured war material in the ASOLONE area.

Hostile attacks were repulsed by fire N. of the MONTELLO, at BRENTONICO, in LAGARINA Valley, and on the slopes of MONTE SPITZ, on the right of the BRENTA Valley. Desultory artillery duels occurred in VALLARSA.

AVIATION. In the BRENTA Valley and along the PIAVE seven hostile machines were brought down in air fights.

SUMMARY OF AIR INFORMATION

CHANGES IN LOCATION OF UNITS

FLANDERS.

21st Protective Flight.....	Halluin area.....	1 May 18.....	Document, R. A. F. Last identified at Dorignies (Vimy-Bapaume region), 10 April 18.
26th Reconnaissance Flight.....	Hoogte .....	8 May 18.....	Document, R. A. F. Last identified in Vimy-Bapaume region, 26 February 18.
288th Reconnaissance Flight.....	Beveren .....	8 May 18.....	Document, R. A. F. Last identified at Dorignies (Vimy-Bapaume region) 10 April 18.

VIMY-BAPAUME REGION.

213th Reconnaissance Flight.....	Croisilles area.....	3 April 18 .....	Document, R. A. F. Last identified in Iseghem area (Flanders) 5 February 18.
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MOREUIL-NOYON REGION.

39th Reconnaissance Flight.....	.....	23 April 18 .....	Machine shot down by French. Last identified in Laon region, 15 Mar 18.
7th Bombing Flight .....	Matigny .....	24 April 18 .....	Prisoner's statements, R. A. F. Left Metz 25 Mar 18.
8th Bombing Flight.....	Matigny .....	24 April 18 .....	Prisoner's statements, R. A. F. Lately unlocated.
9th Bombing Flight.....	Matigny .....	24 April 18 .....	Prisoner's statements, R. A. F. Last identified near Sedan (Champagne region) 1 April 18.
NOTE.—The 7th, 8th, and 9th flights constitute the 4th Bombing Squadron.			
7th Bombing Squadron.....	Etreillers .....	24 April 18 .....	Machine shot down by French. Last identified in the Valenciennes area, 11 Mar 18.
NOTE.—Makes a total of four bombing squadrons in this region.			

VERDUN REGION.

280th Reconnaissance Flight.....	Longuyon area.....	10 Mar 18 .....	Document, R. A. F. Last identified in Laon region, 17 Aug 17.
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IDENTIFICATIONS

LAON REGION.

2nd Bombing Squadron.....	.....	24 April 18 .....	Prisoner's statements, R. A. F.
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AIRDROMES

Region.	Confirmed.		Removed.	
	Sheds.	Hangars.	Sheds.	Hangars.
Flanders .....	13	23	..	..
Lys-Vimy .....	..	35	..	8
Bapaume-Moreuil .....	..	2	..	..
Verdun.....	..	4	..	..

FROM B. R. FRENCH IID ARMY, MAY 11, 1918.

Photographs taken by the British show what may be a new aviation field in course of construction 800 meters south-west of Anoux (6 km. N. W. of Briey).  
The airdromes at Marimbois, Les Baraques and Mars-le-Tour seem to be occupied, and four new hangars have been put up at Longuyon.

EXPLANATIONS OF GERMAN FAILURE IN AIR

Much has been written concerning the German air forces in the Picardy offensive. Following is a list of the reasons advanced in explanation of the failure to come up to German expectations:

1. Inferiority of material and personnel.
2. Difficulty of maintaining communication, rapid advance of troops having greatly increased their distance from airdromes.
3. Necessity of utilizing airplanes to supply troops, due to rapid advance.

ESTABLISHMENT OF RECONNAISSANCE FLIGHTS

FROM R. A. F. SUMMARY OF AIR INTELLIGENCE, MAY 11, 1918.

A prisoner states that the establishment of reconnaissance flights, engaged on artillery and contact patrol work for divisions, is nine machines; for those carrying out photographic and reconnaissance work for Corps there has been no change.

NOTE.—The strength of flights, which previously was six machines, thus appears to have been raised only in the case of units working for divisions on the battle fronts.



# PARACHUTES

FROM FRENCH B. R. A., MAY 1, 1918.

A two-motor A. E. G. machine, which fell in French lines, had two parachutes similar to those carried on balloons. Their use would be simple for the observer ; but almost impossible for the pilot in his inclosed position.

# GAS MASKS

FROM FRENCH B. R. A., MAY 1, 1918.

A gas mask was found on a German aviator, who declared same are now carried by all aviators, because of several casualties from forced landings in gas.

# GERMAN LOSSES

FROM R. A. F. SUMMARY OF AIR INTELLIGENCE, MAY 11, 1918.

An officer prisoner states that the figures giving German losses in the air, published officially once a month, are not accepted by flying personnel ; the figures are intended for the German public and neutrals. A machine shot down within German lines, of which even parts are salvaged, is not counted as a casualty, although, the prisoner states, these are in the vast majority.

# EFFECT OF AIR OPERATIONS

FROM R. A. F. SUMMARY OF AIR INTELLIGENCE, MAY 11, 1918.

A sergeant-major of the 114th Inf. Regt., 199th Division, states that many of the troops billeted in Bray have had to camp outside the town owing to the heavy losses caused by bombing. Many horses were also killed which could not be replaced, and transport difficulties are acute. Owing to heavy losses and lack of rest, the morale of the division has been considerably lowered.

A prisoner of the 10th Bav. Res. Regt., 5th Bav. Res. Div., captured at Bucquoy on May 8th, states : "On the 30th of April, 24 men were killed by bombs near Bapaume."

FROM B. R. A. FRENCH IIID ARMY, MAY 10, 1918.

A non-commissioned prisoner stated that members of the 147th Regt., 37th Div., had told him that the 3d Battalion of their regiment had suffered the following losses due to bombing by airplanes, April 20, in the region of Porque-Ricourt : Two acting sergeant-majors killed ; 20 men wounded ; and 40 horses killed or wounded.

FROM B. R. A. FRENCH IIID ARMY, MAY 11, 1918.

An Alsatian deserter was in a hospital at Ham from April 7 to 28. He saw a number of wounded aviators who told him that the following results had been obtained by French bombing of the field of aviation at Champien : One hundred men killed and wounded ; 20 airplanes and four hangars entirely destroyed ; 12 other machines seriously damaged. Following this raid the flights located around Champien were moved to a safer region.

FROM R. A. F. SUMMARY OF AIR INTELLIGENCE, MAY 12, 1918.

Capt. Ziegler who commanded the 4th Bombing Squadron, was killed during a bombing raid on the squadron's airdrome near Guise about April 21, 1918.

The following are extracts from diary of an officer candidate of the 15th Inf. Regt. :

20th April.—"At Caix. There was an air raid last night and bombs were dropped. It is said that we are going towards Amiens. Daily losses from bombs. All the inhabitants have left except two old women."

24th April.—"During the night, a German ammunition dump explodes after being hit by an English bomb. Gas alarm. The walls of our house are shaking."

# SUMMARY OF OFFICIAL COMMUNIQUE

MAY 14, 1918.

## FRENCH.

(May 14, 1918, 11 a. m.) Our patrols N. of HANGARD Woods, near COURCY, and W. of the MEUSE took prisoners. We repulsed without difficulty a hostile raid on our outposts N. W. of ORVILLERS-SOREL. Artillery fighting was lively in CHAMPAGNE, in the sector of the BUTTE DU MESNIL and in the VOSGES. An attack attempted by the enemy N. of the FECHT broke down under our fire. There is nothing to report from the rest of the front.

(May 14, 1918, 9 p. m.) Intermittent artillery bombardment took place in the GRIVESNES sector. Our batteries broke up hostile concentrations and convoys in the vicinity of MONTDIDIER and on the NOYON-GUISCARD road. In CHAMPAGNE a hostile raid near the BUTTE DU MESNIL broke down completely under our fire. The day was quiet at all other points.

## BRITISH.

(May 13, 1918, evening, continued.) AVIATION. On May 12 all flights were impossible until evening when visibility became excellent and allowed our airplanes to work very actively and usefully in liaison with the artillery. More than eight tons of bombs were dropped on various objectives near MENIN, ARMENTIERES and LA BASSEE, as well as on the docks at BRUGES.

In the course of air fights six hostile machines were shot down. One of ours is missing.

During the night 14 tons of bombs were dropped on the railway stations of DON, MARCOING and CHAULNES, on BAPAUME, PERONNE and the docks at BRUGES. One of our machines has not returned.

(May 14, 1918, 9.45 a. m.) We made a successful raid last night N. E. of ROBECQ and took some prisoners without suffering any loss.

A hostile detachment attacked one of our posts W. of MERVILLE but it was repulsed and decimated.

Hostile artillery was active during the night in the sectors of the SOMME and the ANCRE.

SUMMARY OF AIR INFORMATION, No. 13, MAY 15, 1918.

ITALIAN.

(May 14, 1918, 4.41 p. m.) Hostile attempts to renew attacks on MONTE CORNO, in VALLARSA, and to approach our lines at DOSSO CASINA, N. of the ALTISSIMO and in the CALCINO and ORNIC valleys failed completely under our fire. Italian and British patrols raided the village of PEDESCALA, ASTICO Valley, and the trenches in front of AVE, S. of ASIAGO, inflicting losses on the enemy. Further lively artillery fighting occurred in the TONALE region, in the LAGARINA Valley, on MONTE ASOLONE and N. of the MONTELLO.

AVIATION. Eleven hostile airplanes were brought down in the course of air fighting. British aviators successfully bombed billets of the enemy near ASIAGO.

GERMAN.

(May 14, 1918, 2.08 p. m.) WEST FRONT: Artillery fire on the battle fronts which had shown increased intensity during the early morning moderated during the evening. It was again renewed at many points during the evening.

After violent artillery preparation N. of the LA BASSEE Canal the British attempted strong local attacks during the evening against our positions N. and S. of GIVENCHY. They were repulsed with heavy losses.

Patrolling continued active.

There are no new developments to report from the other theaters of war.

(May 14, 1918, 8.35 p. m.) We made a successful local attack on the British lines on the northern bank of the SOMME along the BRAY-CORBIE road. The enemy's heavy counter-attack broke down.

There is nothing to report.

AUSTRIAN.

(May 14, 1918, Evening). Combat activity on the Italian mountain front remains the same as during the last few days.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### FLANDERS.

54th Pursuit Flight .....	Staden.....	April 23.....	French. New unit, not previously identified.
2nd Mosaic Section .....	Thielt .....	March 23.....	Report, R. A. F. Not previously identified.

### RIVER LYS-VIMY REGION.

15th Protective Flight.....	Linselles .....	May 3 .....	French. Last identified in Bapaume-Moreuil region, April 25, 1918.
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### BAPAUME-MOREUIL REGION.

22nd Reconnaissance Flight....	Caix .....	April 1918....	French. Last identified in Cambrai area in January, 1918.
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### MOREUIL-NOYON REGION.

34th Pursuit Flight .....	Villeselve .....	April 1918....	French. Last identified at Cuirieux (Laon region), March 24, 1918.
4th Protective Flight .....	Ham area.....	May 3.....	French. Last identified at Bertry (Bapaume-Moreuil region), March 2, 1918.
8th Protective Flight .....	With 18th Army .....	May 1918 .....	French. Last identified at Liesse (Laon region), January, 1917.
32nd Protective Flight.....	Oise area .....	April 1918....	French. Lately unlocated.
249th Reconnaissance Flight ....	Sommette .....	May 9 .....	French. Last identified in the Laon region, April 11, 1918.
285th Reconnaissance Flight ....	Cugny.....	April 7.....	French. Last identified in Laon region, April 11, 1918.

## AIRDROMES

	Confirmed Sheds.	Confirmed Hangars.	Removed Sheds.	Removed Hangars.
Vimy-Bapaume .....	..	1	..	..
Bapaume-Moreuil.....	..	30	..	21
Moreuil-Noyon .....	..	12	..	..

## NEW UNITS

### RHEIMS REGION.

75th Pursuit Flight .....	Thugny .....	April 1918....	French. New unit, not previously identified.
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### INTERIOR.

73rd Pursuit Flight.....	Halle and Saale .....	February 25 ....	French. New unit, not previously identified.
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## NEW SCOUT MACHINES

British airmen report having seen new German scout machines in the Douai area. These are believed to be Fokker biplanes.

## DUMMY AIRDROMES

FROM R. A. F. SUMMARY OF AIR INTELLIGENCE, MAY 13, 1918.

Prisoners, recently captured by the French, state that extensive use is made of dummy airdromes, which are lit up at night for the purpose of deceiving Allied night-flying machines. These dummy airdromes are generally in the neighborhood of the airdromes where bombing squadrons are housed.

## BOMBING SCHOOL DOEBERITZ

FROM FRENCH B. R. A., MAY 1, 1918.

There are 12 instructors, each with a machine, and a variable number of students at this school. Students are placed four meters above a map on a platform provided with a sighting tube similar to that on an airplane. The map is attached to an endless belt so it can be moved horizontally by a motor. Students are practiced in dropping little wooden projectiles on the targets indicated on the map.

## EFFECT OF AIR OPERATIONS

FROM R. A. F. SUMMARY OF AIR INTELLIGENCE, MAY 13, 1918.

Prisoners captured by the French state that on the night of April 20-21, the airdrome of the 4th Bombing Squadron, then at Tupigny, (near Guise), was bombed by Allied machines while German airplanes were landing on their return from a raid. Ten machines were completely destroyed and some 50 men, including the squadron commander and three other officers, were killed. This statement is confirmed from other sources.

SUMMARY OF OFFICIAL COMMUNIQUE

MAY 16, 1918.

AMERICAN.

(May 16, 1918, 9.00 p. m.) In LORRAINE patrolling was active and there was again increase of artillery fire. Otherwise the day was quiet at points occupied by our troops.

FRENCH.

(May 16, 1918, 11 a. m.) Lively artillery fighting occurred in the HAILLES-CASTEL sector. A hostile raid W. of MONTDIDIER broke down under our fire. Our patrols N. of the ALETTE took prisoners. There is nothing to report on the rest of the front.

(May 16, 1918, 9.00 p. m.) No infantry actions took place. There was marked activity by the artillery of both sides N. and S. of the AVRE. The day was quiet along the remainder of the front.

AVIATION : On May 15 our pursuit squadrons took advantage of the favorable weather and were extremely active. Seventeen German planes were shot down by our pilots and one by the anti-aircraft defence. In addition four hostile captive balloons were set on fire.

BRITISH.

(May 15, 1918, 9.05 p. m., continued.) AVIATION. On May 14 our airplanes carried out reconnaissance and bombing flights. They also executed photographic missions and worked in liaison with the artillery. In the course of air flights, six hostile machines were brought down and one forced to land disabled. Furthermore, a German airplane was brought down by the fire of our anti-aircraft guns and another by that of our infantry. Two of our machines are missing.

During the night our bombing squadrons were active. Twelve tons of projectiles were dropped on the railway stations of LILLE, MENIN, CHAULNES and PERONNE, as well as on the billets at BAPAUME and in the region S. of the SOMME and on the docks at BRUGES. All our machines returned.

On May 15 we made a successful raid on the station and sidetracks at THIONVILLE. We dropped 24 large bombs and observed explosions on the hangars, the railway and the iron works. Four projectiles fell on the factory at KARLSRUHE and on the railway track. All our machines returned safely in spite of the intense anti-aircraft fire.

(May 16, 1918, 9.40 a. m.) Our troops carried out a raid last night on the enemy's trenches near GAVRELLE and took some prisoners.

There is nothing further to report excepting activity of the artillery of both sides at various points, especially in the valleys of the SOMME and of the ANCRE, E. of ARRAS and on the northern battle front.

ITALIAN.

(May 16, 1918, 4.42 p. m.) Our infantry and assault detachments penetrated the enemy's trenches on MONTE ASOLONE at two points ; part of the garrison was killed while the survivors fled leaving a few prisoners in our hands. A British patrol raided the hostile positions at CANOVE near ASIAGO, capturing prisoners, including one officer ; they also encountered a hostile detachment and inflicted casualties on the enemy. Various attempts of the enemy to approach our advanced posts in the ROSOLE Valley, FORNO GLACIER, at FORTINI, on the left side of the VAL LAGARINA, in the VAL POSINA and on the COL D'ECHELLE were met by our fire and broke down. In the VAL LAGARINA and VALLARSA and on the ASIAGO Plateau, there was increased artillery activity of both sides ; explosions and fires were observed within the hostile positions.

GERMAN.

(May 16, 1918, 2.14 p. m.) WEST FRONT : After the close of the infantry fighting yesterday N. of KEMMEL Hill in the course of which we threw the French out of the part of our lines into which they had penetrated, the artillery fighting in the KEMMEL region diminished. Artillery activity on the other battle fronts of the line also decreased. Violent bursts of fire against our infantry and artillery positions on both sides of the LA BASSEE Canal as well as between the SOMME and the AVRE continued.

On the W. bank of the AVRE the enemy attacked in strength early yesterday from the SENECA Woods. He was repulsed with heavy losses.

Minor reconnaissance combats occurred on the rest of the front.

AVIATION. Lively aerial activity on the battle fronts led to numerous air fights. We shot down 33 hostile airplanes including 14 by the pursuit squadron formerly led by Capt. Baron von Richthofen. Lt. Windisch achieved his 20th air victory.

There is nothing new to report from the other theaters of war.

# SUMMARY OF AIR INFORMATION

## MOVEMENTS OF BALLOON SECTIONS

Several balloon sections were withdrawn from Alsace about the end of April, to receive special instruction preparatory to transfer to Picardy and Flanders, where replacements were needed for heavy losses.

### NEW MODEL MERCEDES MOTOR

FROM FRENCH B. R. A. MAY 1, 1918.

An Albatros D5 A, captured May 5, 1918, was equipped with a 160 H. P. Mercedes motor, the novel features of which were the absence of all copper and the double system of synchronization for machine gun.

### MAYBACH MOTOR

FROM FRENCH B. R. A. MAY 1, 1918.

Brake tests have given 286 h. p. at 1490 revolutions. It will throttle down to 180 revolutions, and uses about 17 liters of gasoline an hour. An arrangement of reducing the course of the gas control lever prevents the pilot from over-speeding the motor on the ground. A pump is provided for creating an artificial pressure of combustible mixture in the cylinders. This is ignited by a starting magneto. The results given by this pump are satisfactory, but it is difficult to start the motor without this arrangement.

### SPEED INDICATOR

FROM FRENCH B. R. A. MAY 1, 1918.

The Deutsche Technische Press describes an instrument which indicates the speed of an airplane with reference to the earth. This instrument is based on the following formula for the speed of a body in motion :

$$V_1 = \text{Int.} \left| \begin{array}{c} t \\ y \text{ dif. } t. \\ 0 \end{array} \right.$$

A steel ball lies on a horizontal steel track, which is placed lengthwise with the fuselage. The ball is maintained normally at the center of the track by means of springs, but when the speed of the machine increases it moves toward the rear, and when the speed of the machine diminishes it moves forward. Its displacement is proportional to the acceleration of the machine. A horizontal disc is caused to revolve at a uniform rate by a clockwork system. On this disc rests a small wheel which can slide with little friction along the length of its rectangular axle. By means of a rod terminated at each extremity by a fork the steel ball moves the little wheel from one side to the other of the center of the horizontal disc. The speed of rotation of the little wheel and its axle are at each instant proportional to the acceleration of the airplane. The axle of the little wheel is attached to an indicator which records the total number of revolutions, which number is proportional to the speed of the airplane with reference to the earth. The graduation of the indicator is such that the marking corresponds to the speed of the airplane.

### FUEL MIXTURE

From deserters' statements it is learned that since March 15, all German airplanes, except those on long distance flights, have been using a fuel consisting of two-thirds gasoline and one-third benzene.

### AIR OPERATIONS

FROM R. A. F. COMMUNIQUE, MAY 8, 1918.

PERIOD APRIL 29, TO MAY 5.

During this period the British have claimed officially 51 German airplanes brought down, and 13 driven down out of control. In addition, four machines have been brought down by anti-aircraft and infantry fire from the ground. Sixteen British machines are missing. Approximately 63 tons of bombs were dropped, and 7,024 photographs taken.

### BAITING TACTICS.

Major R. S. Dallas, No. 40 Squadron, flew over La Brayelle Airdrome at a low height and fired on the hangars to attract attention. He then dropped a parcel with the following message inside : "If you won't come up here and fight, herewith one pair of boots for work on the ground. Pilots—for the use of." Getting into the mist, he waited until a party of men had collected to examine the parcel, when two bombs were dropped, one burst being observed near the target. He also fired 100 rounds into the troops, scattering them and causing a general panic. On the return journey he shot down a hostile scout.

SUMMARY OF OFFICIAL COMMUNIQUE

MAY 17, 1918.

AMERICAN.

(May 17, 1918, 9.00 p. m.) Today fighting was limited to reconnaissances and intermittently active artillery fire. There was increased aerial activity N. of TOUL and in LORRAINE.

FRENCH.

(May 17, 1918, 11.00 a. m.) A violent bombardment occurred during the night in the region of HAILLES. A hostile raid near MESNIL-St. GEORGES was repulsed and prisoners were taken. In the region S. of CANNY-SUR-MATZ our detachments penetrated the enemy's lines at some points and took about 40 prisoners, including one officer.

On the S. bank of the OISE a hostile attempt against one of our outposts in the VARENNES sector was broken up by our fire. There is nothing to report from the rest of the front.

(May 17, 1918, 10.00 p. m.) There is nothing to report beyond normal activity by the artillery on both sides along the front N. and S. of the AVRE.

AVIATION: During the night of May 14-15 and on May 15 a great many machines took part in bombing operations in the hostile zone. Thirty-six thousand kgs. of projectiles were dropped on the railroad stations and aviation fields at St. QUENTIN, JUSSY, JUNIVILLE-LE-MARTEL, NESLES, HAM, etc. A munitions dump blew up at NESLES. Fires were reported at GUISCARD, LE CHATELET and in the railroad station at NESLES. The following night 30,000 kgs., projectiles were dropped in the same region and 10,000 kgs., in the vicinity of AMAGNE-LUCQY and MONTCORNET.

On May 16, four hostile machines were shot down and three others badly damaged. During the night of May 16-17 the railroad stations and German billeting areas in the vicinity of CHAULNES, ROYE, NESLES, St. QUENTIN, etc., were the objectives for 35,000 kgs., of projectiles. The followings results were reported: The explosion of a munitions dump in the CHAMPIEN Woods, fires and explosions at ECQUELLY, VILLESELVE and the railroad station at NESLES.

BRITISH.

(May 16, 1918, 9.15 p. m.) With the exception of some activity on the part of the artillery of both sides on the front N. of the Lys, there is nothing of importance to report.

AVIATION: On May 15 our airplanes and captive balloons worked very actively in liaison with the artillery. Long-distance reconnaissances were carried out all day and very many photographs were taken in the front and rear zones of the enemy.

The activity of our bombing planes was uninterrupted from morning until evening. We dropped more than 24 tons of bombs on the railway stations at TOURNAI, COURTRAY, CHAULNES, on the billets in the neighborhood of DOUAI, BAPAUME MENIN, the valley of the SAUME and along the ZEEBRUGGE-BRUGES Canal. The German air service was very active early in the morning and also in the evening. Their scouts attacked our bombing planes with vigor. Twenty-five German machines were shot down and 12 others forced to land disabled. Another was brought down by the fire of our machine-guns. Eleven of our machines are missing.

During the night our bombing squadrons dropped more than 14 tons of projectiles on the railway stations at CHAULNES, LILLE and DOUAI, on the enemy's billets at PERONNE, BRAY and BAPAUME as well as on the docks at BRUGES. One of our machines is missing.

Early on May 16 our airplanes went up to bomb the factories and railway station at SARREBRUCK. In crossing the lines they met ten hostile scouts. Fighting took place during the whole journey. Twenty-five German machines were assembled for the attack on ours with the greatest vigor. Nevertheless we dropped 24 large bombs on our objectives. We observed several explosions on the railway line. A fire was observed. When the bombardment was finished our machines concentrated their efforts on the enemy and shot down five of them. One of our machines was shot down; all the others returned.

(May 17, 1918, 10.00 a. m.) We repulsed a hostile raid last night near MOYENNEVILLE, S. of ARRAS.

The artillery of both sides was very active during the night in the sector of PACAUT Woods, N. of HINGES.

Hostile artillery showed increased activity between LOCON and HINGES, and from the Forest of NIEPPE to METEREN.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### FLANDERS.

16th Pursuit Flight.....	Menin area.....	14 May 18.....	Prisoner's statement, R. A. F. Last identified in River Lys-Vimy region, 24 Apr. 18.
51st Pursuit Flight .....	Menin area.....	14 May 18.....	Machine shot down, R. A. F. Last identified at Abeele (same region), March 1918.

### RIVER LYS-VIMY REGION.

8th Reconnaissance Flight.....	Lille area.....	1 May 18.....	Document, R. A. F. Last identified at Orchies (same region), 11 Apr. 18.
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### LORRAINE.

67th Reconnaissance Flight .....	Lorquin.....	15 May 18.....	French. Lately unlocated.
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## IDENTIFICATIONS

### MOREUIL—NOYON REGION.

23rd Reconnaissance Flight .....	.....	15 May 18.....	Machine shot down by the French. (R. A. F.)
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## AIRDROMES

Region.	Confirmed.		Removed.	
	Sheds.	Hangars.	Sheds.	Hangars.
Flanders .....	1	6	..	5
River Lys-Vimy .....	3	..	..	1

## COOPERATION BETWEEN INFANTRY AND AIRPLANES

Instructions recently issued by the Ypres Group, IVth German Army, emphasize the necessity for good cooperation between infantry and airplanes. An extract from this document is given below :—

“Ypres Group. Ic. Department.	To be hung out in billets.
	To be continually mentioned during training.

### NOTES ON THE COOPERATION BETWEEN INFANTRY AND AIRMEN.

“Every infantryman in the front line must realize and have the firm wish to show the infantry airmen who appears over him where he is, when he is asked by the airman to show his position ; this is in the infantryman's own interests, and he will endeavor to act accordingly in all circumstances of battle, even under the heaviest enemy artillery fire.

“The Higher Command must constantly know how the front line runs, especially in battle ; only then can reinforcements be put in at the right time and the artillery fire be well directed.

“Also the duties of comradeship demand from the infantryman that he make easier the task of the infantry airmann, who risks his life whenever he flies low.”

This and other recently captured documents show that the enemy is paying great attention to the elaboration and perfection of contact patrol work, for which duties special armored machines have been produced.

## DUMMY AIRDROMES

### FROM FRENCH G. Q. G. BULLETIN OF INFORMATION MAY 17, 1918.

A deserter has asserted that there was a dummy airdrome one kilometer east of Menin along the Menin-Courtrai road. Panels simulating airplanes were spread out on the ground, but the neighboring tents were empty. Apparently the Germans often change their airdromes, leaving the tents, hangars, and dummy airplanes in place.

## EFFECT OF AIR OPERATIONS

### EXTRACT FROM A CAPTURED DIARY : R. A. F. SUMMARY OF AIR INTELLIGENCE, MAY 16, 1918.

“21st April, Sunday :—Our train carries us towards Amiens. Very early in the morning, enemy aviators dropped bombs on us ; we were sleeping in the carriages ; the noise was terrific and the incident made a very unpleasant impression. We continued our journey and stopped at Chaulnes station. Suddenly bombs fell on the station—a number of men were wounded, several mortally. We hurriedly took cover in the cellar like heroes. A large number of horses were killed as well. It is a good beginning.”

## SUMMARY OF OFFICIAL COMMUNIQUEES

### MAY 19, 1918.

#### FRENCH.

(May 19, 1918, 11 a. m.) Artillery of both sides was active in the region N. of the AVRE. Our patrols in the HANGARD sector took prisoners.

Hostile raids near the lower AILETTE, in ARGONNE and in WOEVRE broke down under our fire. On the other hand, we took prisoners in the course of a minor operation E. of RHEIMS.

There is nothing to report from the rest of the front.

(May 19, 1918, 9 p. m.) There is nothing to report beyond intermittent artillery activity N. and S. of the AVRE.

AVIATION. On May 17 and 18 our pilots engaged in many combats in the course of which 12 German airplanes and four captive balloons were destroyed; 23 hostile planes were badly damaged and fell within their own lines. In addition three machines were shot down by the anti-aircraft defence, of which one is to the credit of an American battery.

On the same days and the following nights 44,000 kgs. of projectiles were dropped by our bombing squadrons on the railway stations, billets and aviation fields of the hostile zone. Several fires, some explosions and considerable damage are reported.

#### BRITISH.

(May 18, 1918, evening.) This morning at daybreak we carried out successful raids in the MORLANCOURT sector and S. of HULLUCH, in the course of which we took some prisoners and two machine-guns. In these actions Australian troops rushed a hostile post W. of the village of MORLANCOURT, taking the garrison by surprise and capturing 21 prisoners and a machine-gun without losing a man.

Hostile artillery showed more activity this morning in the VILLERS-BRETONNEUX sector.

AVIATION. On May 17 during the day our air service was favored by the fine weather although at certain times visibility was mediocre. Our airplanes and captive balloons co-operated actively with the artillery. Many photographs of the enemy's rear zones were taken and bombing operations were continued; more than 22 tons of projectiles were dropped on the railway stations of COURTRAI and CHAULNES, on several hostile airdromes and billets near the front.

The German air service was not as active as on the previous days although large formations of hostile machines were encountered far to the E. of our lines. Nineteen German machines were shot down and four others forced to land disabled. Ten of our machines are missing.

On the same day more than one ton of bombs was dropped on the railway station at METZ. Several bursts were observed on the railway line and on the neighboring factories. All our machines returned.

During the night our machines dropped 11 tons of bombs on the railway stations at CHAULNES, HAUBOURDIN, DOUAI and MARCOING, on PERONNE and on several objectives in the neighborhood of BAPAUME.

Raids were also carried out on the railway stations of THIONVILLE and METZ. Thirty-two large bombs were dropped and there were several full hits. A fire broke out at THIONVILLE. One of our machines is missing.

On May 18 a raid crowned with success was carried out in full daylight on the railway stations, the factories and the barracks at COLOGNE. Thirty-three bombs were dropped and bursts were observed on the freight stations. Our bombing planes were attacked by German pursuit planes of which two were obliged to land disabled. All our machines returned.

(May 19, 1918, 9.45 a. m.) We carried out a successful local operation last night near VILLE-SUR-ANCRE, N. W. of MORLANCOURT. We improved our position in this sector, took prisoners and captured machine-guns.

In the course of successful raids N. W. of ALBERT and near HAMEL we took some prisoners and captured four machine-guns.

A raid attempted by the enemy N. W. of BETHUNE was repulsed by our fire before it was able to reach our lines.

#### GERMAN.

(May 19, 1918, 1.47 p. m.) WEST FRONT. The British made an attack with several companies W. of HULLUCH. They were repulsed with heavy losses. Infantry activity was otherwise limited to reconnaissances.

Artillery fire which continued actively on the battle fronts until early in the morning, diminished during the afternoon and was not renewed until towards evening. The enemy showed particular activity between ARRAS and ALBERT and our batteries in that region were frequently under violent fire.

(May 19, 1918, 8.38 p. m.) On the S. bank of the ANCRE British local attacks before MORLANCOURT broke down with losses.



# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### RIVER LYS—VIMY REGION.

236th Reconnaissance Flight .... Pont-a-Marcq..... May 16..... Machine shot down, R. A. F. Last identified in Moreuil-Noyon region, Apr. 19.

### MOREUIL—NOYON REGION.

5th Mosaic Section..... Hancourt ..... May 16..... Machine shot down, R. A. F. Not previously identified.

## AIRDROMES

Region.	Confirmed.		Removed.	
	Sheds.	Hangars.	Sheds.	Hangars.
Flanders .....	4	5	..	..
River Lys-Vimy .....	13	19	..	..
Vimy-Bapaume .....	6	3	..	1
Moreuil-Noyon .....	5	..	..	..

## ORGANIZATION OF AN ARMY AIRCRAFT PARK

FROM FRENCH B. R. A., FEB. 15, 1918.

In the German Army, each army in the field is provided with an Army Aircraft Park which contains not only a reserve of material, but in addition a reserve of personnel for the flights of the army.

Each aircraft park is commanded by a captain.

The number of personnel varies from 300 to 600 men according to the activity of the army front.

The Third Army Aircraft Park (at Mouzon) comprises about 300 officers and men, distributed as follows:

- 1 captain, in command.
- 1 second lieutenant, second in command.
- 1 pay officer and office staff.
- 1 group of pilots under the orders of a second lieutenant (*Flugzeugfuhrerkolonne*).
- 1 group of observers under the orders of a lieutenant.
- 1 photographic section under the orders of a photographic officer (*Bild-Offizier*).
- 1 stores depot, under a depot officer (*Schirrmeister*).
- 1 clothing store.
- 1 section for examining pilot candidates.
- 1 M. T. section under a second lieutenant.
- 1 company of repair mechanics (*Werftkomp*) under an engineer (*Parkingenieur*).

In October, 1917, the Third Army Park contained 25 scout machines and 18 reconnaissance machines.

The company of repair mechanics comprised 150 to 180 men.

The groups of pilots and observers are composed of young pilots and observers who have arrived from Germany and are intended as drafts to fill vacancies in flights at the front. They comprise at least 12 to 20 pilots and the same number of observers. Should they remain more than about a fortnight at the park, they are issued machines which have been repaired and carry out practice flights.

## EQUIPMENT OF THE 253d RECONNAISSANCE FLIGHT

FROM FRENCH B. R. A., FEB. 15, 1918.

The 253d Reconnaissance Flight is a Prussian unit and was formerly attached to the VIIth Army in the Laon region. Since Dec. 9, 1917, it has been stationed at Rustenhart.

The personnel, observers and pilots is composed of ten officers, two vice sergeant majors and one lance corporal. In addition, there are 70 or 80 men engaged in repairs and upkeep. All the observers are officers.

The photographic section is under the direction of Lieut. Bittner.

Captain Reinhold is the flight commander.

The 253d Reconnaissance Flight is equipped with six machines, five D. F. W. C. 5 and one Rumpler.

## SHORTAGE OF PERSONNEL

FROM R. A. F. SUMMARY OF AIR INTELLIGENCE, MAY 19, 1918.

A prisoner states that there is a marked shortage of personnel in the German Air Service, and gives as a contributory factor the large number of casualties which occur through flying accidents at training centers.

## SUMMARY OF OFFICIAL COMMUNIQUE

MAY 21, 1918.

AMERICAN.

(May 21, 1918, 9 p. m.) In the course of reconnaissance combats in LORRAINE, we captured prisoners. Here and in the WOËVRE artillery of both sides showed considerable activity.

FRENCH.

(May 21, 1918, 11 a. m.) Artillery of both sides was active in the region of THENNES-HAILLES and at some points to the S. to the AVRE. Our patrols S. W. of LASSIGNY, on the right bank of the MEUSE and in LORRAINE captured prisoners.

The night was quiet on the rest of the front.

(May 21, 1918, 9 p. m.) There were no infantry actions. There was intermittent artillery activity S. of the SOMME along the OISE and in the VOSGES.

On May 19 pilots of our pursuit planes shot down six German planes; nine other hostile planes fell within their own lines badly damaged in combat.

On the same day as well as on the night of May 19-20, 25,000 kgs., of projectiles were dropped by our bombing squadrons on the billets of ROSIERE-EN-SANTERRE, the aviation fields at VILLESELVE and VAUVILLERS and the railroad stations at PERONNE, NESLES, CHAULNES, and vicinity. A large fire was reported at ROSIERES. In addition, on the same night Italian planes bombed the railroad station at MONTCORNET and the airdrome of VILLE-AUX-BOIS where important damage was reported.

BRITISH.

(May 20, 1918, 9.10 p. m., continued.) AVIATION. Our air service was very active all day on May 19. Our captive balloons and airplanes accomplished much work in liaison with the artillery, signalling adjustment and locating batteries in action.

Our bombing squadrons dropped more than 17 tons of projectiles on the enemy's railway stations, aviation grounds, depots and billets.

Hard fighting occurred well to the E. of the lines where our bombing machines were attacked by important formations.

We destroyed three German captive balloons; 27 hostile airplanes were shot down and three others forced to land disabled; 12 of our machines are missing.

Bombing operations were very active at various points during the night. Our machines dropped 15 tons of bombs on the railway stations of CHAULNES, DOUAI, DON and MARCOING, on the aviation ground of ST. DENIS, WESTREHEM-SUR-BRAY and BAPAUME.

A large German bombing plane was brought down in our lines by our anti-aircraft gun fire. All our machines returned.

On May 20 during the day one ton of bombs was dropped on the barracks, gas works and railway station at LANDLU, N. W. of KAARLSRUHE. Several projectiles struck the railways and two fires broke out. All our machines returned.

(May 21, 1918, 10 a. m.) Yesterday evening troops from a Surrey battalion carried out a successful local operation N. W. of MERVILLE. In this sector we reduced a hostile salient, bringing back 30 prisoners and capturing six machine-guns. Early this morning after violent bombardment the Germans launched a counter-attack against our new positions. It was broken up by our artillery and machine-gun fire. Last night in the course of a successful raid on hostile trenches S. E. of ARRAS we captured some prisoners and a machine gun.

German artillery showed activity during the night in the ALBERT sector, in the neighborhood of HEBUTERNE, as well as between the QUEREU and the Forest of NIEPPE. There was greater activity between the SCARPE and HILL 70 N. of the ANCRE.

The gas shell fire reported yesterday N. of BETHUNE was violent.

(May 21, 1918, night.) This morning, the enemy counterattacked in great force our new positions to the N. W. of MERVILLE on a front of 1,100 meters. A violent bombardment preceded the enemy attack, but notwithstanding the intensity of the artillery preparation, his infantry succeeded in penetrating our positions only at two points from which our troops repulsed him. Our line is entirely intact.

Two raids attempted by the enemy last night in the sector to the N. of BALLEUL were repulsed by French troops. This morning we took some prisoners and a machine-gun in the course of a patrol action in the outskirts of BOYELLES;

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### RIVER LYS-VIMY REGION.

32nd Reconnaissance Flight . . . Lille-area..... May 16... Machine shot down, R. A. F. Last identified in Peronne area, Apr. 16.

### BAPAUME—MOREUIL REGION

18th Pursuit Flight..... Cambrai area ..... May 16... Prisoner's statement, R. A. F. Last identified in Peronne area, Apr. 19.  
46th Pursuit Flight..... Cambrai area ..... May 16... Prisoner's statement, R. A. F. Last identified in Peronne area, Apr. 19.

### MOREUIL—NOYON REGION.

62nd Pursuit Flight ..... Ham area ..... May 11... Prisoner's statement, R. A. F. Last identified at Bohain (same region), Mar. 22.  
63rd Pursuit Flight ..... St. Quentin area ..... May 16... Machine shot down, R. A. F. Last identified in Champagne, Mar. 17.  
7th Bombing Squadron..... Estrées-en-Chaussée ..... May 16... Machine shot down, R. A. F. Last identified at Etreillers (same region), Apr. 24.

## IDENTIFICATIONS

### BAPAUME—MOREUIL REGION

4th Pursuit Flight ..... Cappy..... May 16... Machine shot down, R. A. F.  
6th Pursuit Flight..... Cappy ..... May 16... Prisoner's statement R. A. F.  
10th Pursuit Flight ..... Cappy ..... May 16... Prisoner's statement, R. A. F.

NOTE. The 4th, 6th, 10th and 11th Pursuit Flights now constitute the 1st Pursuit Squadron; the 18th and 46th Pursuit Flights no longer belong to this squadron.

### MOREUIL—NOYON REGION

18th Protective Flight ..... Dury ..... May 15... Prisoner's statement, R. A. F.  
251st Reconnaissance Flight.. Nesle..... Apr. 29... Prisoner's statement, R. A. F.  
254th Reconnaissance Flight .. Rouvroy..... May 3... Prisoner's statement, R. A. F.  
287th Reconnaissance Flight .. ..... Mar 6 .... Document R. A. F.

## AIRDROMES

Region	Confirmed		Removed	
	Sheds.	Hangars.	Sheds.	Hangars.
Flanders .....	.. 1	2	..	7
River Lys-Vimy .....	6	9	..	..
Vimy-Bapaume .....	..	..	..	7
Bapaume-Moreuil.....	..	..	..	4

## EQUIPMENT AND DUTIES OF 1st PURSUIT SQUADRON

FROM R. A. F. SUMMARY OF AIR INTELLIGENCE, MAY 20, 1918.

A prisoner states that the flights in the 1st Pursuit Squadron (4th, 6th, 10th and 11th) are equipped with 12-14 machines each; the majority of these are Fokker triplanes with 110 h.p. rotary engines, but a few Fokker biplanes (1-2 per flight) have recently been issued to the squadron. No definite patrolling area is allotted to this squadron; it is employed on any part of the front within reach of its aerodrome, where its services are most needed.

## SUMMARY OF OFFICIAL COMMUNIQUEES

MAY 22, 1918.

### AMERICAN.

(May 22, 1918, 9 p. m.) Artillery activity has decreased. There are no new developments to report.

### FRENCH.

(May 22, 1918, 11 a. m.) The night was marked by artillery actions of some violence in the vicinity of HAILLES, SENECAZ Woods, ROUVRAY and PLEMONT.

Patrolling and reconnoitering activity was considerable along the entire AILETTE front.

We made a raid on the hostile lines W. of the MAISON-DE-CHAMPAGNE.

Two hostile raids, in WOEVRE and in LORRAINE were repulsed.

(May 22, 1918, 9.15 p. m.) There was mutual artillery activity at various points along the fronts of the SOMME and the OISE.

There were no infantry actions during the night.

### BRITISH.

(May 21, 1918, 11 p. m., continued.) AVIATION. On May 20 during the day our airplanes were again very active. Several long-distance reconnaissances were carried out, many photographs were taken successfully and observations made in liaison with our artillery.

In the course of the day our bombing squadrons dropped 22 tons of projectiles on the railway stations, aviation grounds and billets of the enemy. German patrols were particularly active in attacking our reconnaissance and bombing planes. Twelve German airplanes were brought down in air fights and two others forced to land disabled. One hostile machine was shot down by our anti-aircraft guns. Two captive balloons were also destroyed. Four of our machines are missing.

During the night we bombed vigorously the aviation grounds in the neighborhood of GAND, TOURNAI and ST. QUENTIN, where German squadrons for the purpose of night bombardments are stationed. Thirteen tons of bombs were dropped on the railway stations of THIONVILLE, METZ and COBLENTZ.

On May 21, about 8 p. m., 22 large caliber bombs were dropped by our machines on the railway stations at NAMUR and CHARLEROI; one of our machines is missing.

Since the beginning of the German offensive exactly two months ago 1,000 German airplanes have been brought down or forced to land disabled and we have dropped more than 1,000 tons of bombs within the hostile lines.

(May 22, 1918, 9.55 a. m.) We made successful raids last night at several points on the front. In the sector S. E. of ARRAS our troops penetrated the German trenches at two points, taking 14 prisoners and bringing back one machine-gun.

Some prisoners were taken in other raids in the neighborhood of LOCON and in the sector from METEREN to the FOREST of NIEPPE.

N. of the YPRES-COMINES Canal we took 15 prisoners.

The enemy attempted a raid last night N. of ALBERT but was repulsed.

Hostile artillery showed activity during the night near DERNANCOURT. It was also very active E. of the Forest of NIEPPE.

A gas shell bombardment of some intensity occurred in the sector N. E. of BETHUNE.

(May 22, 1918, evening). Early today a second attempt of the enemy against our positions S. E. of MESNIL was repulsed. Besides raids described this morning we succeeded in another raid last night in the neighborhood of HEBUTERNE. We inflicted heavy losses, taking some prisoners. From the rest of the front there is nothing to report, save reciprocal artillery activity in various sectors.

#### GERMAN.

(May 22, 1918, 2.15 p. m.) WEST FRONT. Artillery activity continued in the KEMMEL region. N. of KEMMEL village and S. of LOCRE strong local attacks made by the enemy during the evening broke down.

Our rear areas were again under heavy fire. Between ARRAS and ALBERT also hostile artillery was very active during the evening.

Between the OISE and the SOMME fighting only showed a temporary increase.

On the rest of the front there is nothing of importance to report.

AVIATION. One of our bombing squadrons destroyed an extensive French munition dump near BLARGIES on the night of May 20-21. Lt. Menkhoff achieved his 27th and Lt. Puettter his 23d and 24th air victories.

(May 22, 1918, 8.31 p. m.) There is nothing new to report from the theaters of war.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### WOEVRE REGION

65th Pursuit Flight ..... Mars-la-Tour..... May 19... Prisoner's statement, French. Last identified at Stenay (Verdun region), April 10,

## IDENTIFICATIONS

### FLANDERS.

3rd Bombing Squadron..... Ghent area..... Apr 15..... Prisoner's statement, R. A. F.

### WOEVRE REGION.

64th Pursuit Flight ..... Mars-la-Tour ..... May 19..... Prisoner's statement, French.  
46th Reconnaissance Flight ..... Marimbois..... May 19..... Prisoner's statement, French.  
298th Reconnaissance Flight .... Buxieres-les-Baraques... May 19..... Prisoner's statement, French.  
Mosaic Section, Army "C" ..... Mars-la-Tour ..... May 19..... Prisoner's statement, French.

## AIRDROMES

Region	Confirmed		Removed	
	Sheds.	Hangars.	Sheds.	Hangars.
Flanders .....	9	..	..	12
River Lys-Vimy .....	8	14	..	5
Vimy-Bapaume .....	5	..	..	3
Moreuil-Noyon .....	..	11	..	..

## INSTRUCTIONS ON SALVAGE AND TREATMENT OF AIRPLANES LANDING BEHIND GERMAN LINES

TRANSLATION OF A GERMAN DOCUMENT. FROM SUPPLEMENT TO R. A. F. SUMMARY OF AIR INTELLIGENCE,  
MAY 21, 1918.

Headquarters IVth Army,  
I/ab Kofl.\* Koflak. No. 989. October.

Army Headquarters,  
October 28th, 1917.

## NOTES ON THE SALVING AND TREATMENT OF THE ENEMY'S OR OUR OWN MACHINES WHICH HAVE LANDED OR CRASHED.

For the benefit of our airmen and for the development of our own airplanes, it is of the greatest importance that hostile machines which have been shot down should be salvaged as carefully and completely as possible. Every soldier who is present when a hostile machine crashes, or makes a forced landing, must and can help if he observes the following points:—

I. Measure to be taken when machines land or crash outside the zone under hostile artillery fire.

1. If the crew is alive, prevent the destruction of the machine with all the means at your disposal, by calling or waving to the crew, and if necessary by energetic use of your rifle. Prevent the crew disposing of letters, documents and instruments.

2. The senior soldier present is personally responsible for guarding the machine and for forming a cordon around it, until sentries are detailed by the nearest unit or Town Major, whose duty it is to do this. One or two days may elapse before the salvage party arrives.

3. It is the duty of sentries to keep a space of some 20 metres around the airplane free from all spectators. Prevent everybody, even officers, from touching, searching, photographing, or getting into the machine. Do not play with pet-cocks, switches, etc., and prevent people from approaching the machine with lighted cigars, as it may thus be set on fire.

4. No one has the right to remove even the smallest part of an airplane, even when it is completely wrecked. It is forbidden to remove their special clothing from the airmen; the hostile airmen may be searched for papers (see below) only by officers or personnel belonging to the Army Center for Hostile Aircraft Activity (the latter wear gorget patches on their collars).

5. Take the crew prisoners; leave them their special clothing (cap, muffler, gloves, belt and furs); maps, letters, newspapers and all other documents to be immediately taken from prisoners by an officer and to be wrapped and sent with the prisoners to the nearest unit. Await the decision of the Army Center (see par. 6); take the wounded to the nearest medical station. All interrogating, even by officers, aviators, etc., makes the subsequent interrogation more difficult and is forbidden.

6. It is the duty of the first officer arriving on the scene to inform Army Center for Hostile Aircraft Activity, at Lendelede, by telephone. (Communication may be obtained by Roulers, Thielt, Ingelmunster, Courtrai or Menin). The location of the airplane, its condition, where the crew has been sent, and where the guard is, will be clearly reported, making sure that everything has been understood correctly.

7. The salvaging of the machine is to be carried out only by men of the Air Service under the command of an officer. As regards salvage when the machine is under hostile artillery fire, see Section II below.

II.—Measures to be taken when an airplane lands under effective hostile artillery fire.

\* Kofl.—Commander of the Aviation Troops of an Army.

§ Koflak.—Commander of the Anti-aircraft Guns of an Army.

8. The machine will be moved into dead ground behind trees or houses, so as to be screened from the enemy's ground and air observation.

9. Treatment of prisoners, removing of documents, etc., as in par. 5. Prevent the crew from sending signals by means of light-pistols, etc. When there is danger that the machine may be destroyed by artillery fire, salve all important parts quickly; such articles are: documents, camera with plates, machine guns with ammunition, apparatus and instruments in the pilot's and observer's cockpits, watches, light-pistols and ammunition, and special clothing. Leave the bombs where they are. Write down the number and letter marking on the airplane and the number of the engine.

10. Report to the Army Center for Hostile Aircraft Activity and give in detail: time and place machine landed, if possible, number, nationality and type of machine, number and type of engine, whether badly damaged or otherwise, where and with whom objects already salvaged have been deposited, where prisoners and documents are, whether the former are alive, wounded or dead, and how far forward motor trucks can proceed. Also, make arrangements for the guidance of a salvage party which may come up in the night.

11. Salvage is a matter for the Air Service; no salvage money will be given for ordinary salvage; rewards will only be given for salvage under hostile artillery fire or for preventing the destruction by the crews of machines, or to sentries placed to prevent looting and removing of single parts. These duties are remunerated with high salvage pay. Only airplane salvage centers (not other salvage dumps) will accept airplanes, and these only complete machines, not single parts broken off the machines. If only parts can be salvaged, a certificate to this effect signed by the regimental or other commander will be furnished.

12. If it is not possible for the Air Service to salve the machine or to send trucks far enough up but only in these cases, important parts will be salvaged at night by experts. Such parts are all those mentioned in Par. 9 which have not yet been salvaged, and further, rubber, copper piping, brass, instruments, tail fin (the number of the machine is often painted on that) and engines.

Not only can you help by salvaging machines; every report about a machine shot down is of great value. You all take the greatest interest in our fighting in the air. Help our airmen who, after their exhausting work in the air, are in need of rest; help our anti-aircraft and machine gunners in their lengthy investigations of their victories. The enemy makes every endeavor to throw doubt on and reduce the number of our successes in the air. This procedure can best be countered if we can give the complete details of every single machine shot down. It is important, for subsequent publication, to know the type, number of airplane and engine, and names of the crews.

Consequently, all details of aerial combats (time, place, result, whether the hostile machine went down in flames or broke up in the air, whether the crew fell out and where the machine crashed on the ground, etc.) are all-important. Therefore, write down these details and send them through your unit to Army Center for Hostile Aircraft Activity, where all matters concerning machines shot down are dealt with.

For the Army Commander.

The Chief of the General Staff,

(Sd.) VON LOSSBERG,

Major-General.

## SUMMARY OF OFFICIAL COMMUNIQUEES

MAY 24, 1918.

### AMERICAN.

(May 24, 1918, 9 p. m.) There are no new developments to report. It is established that our aviators shot down hostile machines on May 21.

### FRENCH.

(May 24, 1918, morning.) German raids S. E. of MESNIL-ST. GEORGES and W. of NOYON failed under our fire. We penetrated the enemy's lines S. E. of COUCY, in CHAMPAGNE and in the VOSGES and took about 15 prisoners. Artillery showed intermittent activity at some points on our front.

(May 24, 1918, 9 p. m.) One of our detachments penetrated into the German lines S. of CANNY-SUR-MATZ and blew up dug-outs. On the other hand a hostile raid failed E. of SAMPIGNY. There is nothing to report from the remainder of the front.

### BRITISH.

(May 23, 1918, evening.) Hostile raids were repulsed during the night at AVELUY Woods and S. of HEBUTERNE with losses to the enemy.

A detachment of our troops attacked a machine-gun post in AVELUY Woods and destroyed the gun.

Yesterday evening French troops took some prisoners and some machine-guns in the course of successful raids N. of BAILLEUL and E. of LOCRE.

There is nothing else of importance to report.

AVIATION. On May 22 our airplanes continued to carry out artillery regulating, bombardment and photographic work. The enemy aviation grounds from which the night bombing machines started were again bombarded and more than 18 tons of projectiles were dropped on those objectives as well as on hostile cantonments.

Thirteen German machines were attacked in air fights and two others forced to land disabled. One hostile machine was brought down by the fire of our machine-guns. Three of our airplanes are missing.

At nightfall we dropped 11 tons of bombs on the enemy's airdromes, on the docks at BRUGES and on billets in the region of the SOMME. Several projectiles struck a train which caught fire. Furthermore our aviators attacked the town of MANNHEIM and dropped 24 large bombs on the chlorine factory where two large fires were observed; they clearly recognized in the moonlight the charred beams of the factory buildings set on fire by our bombardment of the preceding night.

At the same time four tons of bombs were dropped on the very important electric power station of KYENSEWALD (?) immediately E. of SARREBRUCK. The generator building was struck by a bomb and another projectile caused a cloud of steam to escape from one of the structures of the plant. All our machines returned.

On May 23, at 11 o'clock, we heavily bombarded the railway station of METZ-SABLONS. Explosions were observed on the engine-house and railway line. The enemy's anti-aircraft fire was considerable; nevertheless all our machines returned uninjured.

(May 24, 1918, 10.05 a. m.) Some of our men are missing as a result of a raid by the enemy N. of Hill 77. A hostile raid attempted yesterday evening on one of our posts in AVELUY Woods was repulsed. We made a successful raid shortly after midnight N. of LA BASSEE and took some prisoners. Some prisoners were also captured in the course of patrol combats N. of the YPRES-COMINES Canal.

after midnight N. of LA BASSEE and took some prisoners. Some prisoners were also captured in the course of patrol combats N. of the YPRES-COMINES Canal.

Last night hostile artillery was active W. of LENS and near GIVENCHY and FESTUBERT. Our positions in the Forest of NIEPPE sector were bombarded with gas shells.

#### ITALIAN.

(May 24, 1918, 4.55 p. m.) On the COSTA DI SALO, N. E. of Lake LEDRO, our patrols passed through the enemy's advanced defences and penetrated a portion of his line of resistance. We destroyed the garrison and took 11 prisoners, several rifles and other war material.

In the ZUGNA TORTA region a hostile counter-attack, following attacks by our detachments was repulsed and ten prisoners remained in our hands.

The enemy attempted raids and local attacks on MONTE VIES, in the LEDRO Valley, on MONTE TRAPPOLA, in the VALLARSA, in the ASIAGO Basin, between the BRENTA and the PIAVE, on MONTE PERTICA and at PORTE DI SALTON, but they all failed under our fire.

There was intense aerial activity and five hostile machines were brought down by our aviators.

#### GERMAN.

(May 24, 1918, 12.25 p. m.) WEST FRONT. The situation is unchanged. In the KEMMEL region, on both sides of the Lys and of the SCARPE, S. of the SOMME as well as between MOREUIL and MONTDIDIER artillery activity was renewed during the evening and continued lively during the night also. Infantry activity was limited to reconnaissance combats. In the course of operations by our troops S. W. of BUCQUOY and along the OISE prisoners were taken.

(May 24, 1918, 8.31 p. m.) There is nothing new to report from the theaters of war.

#### AUSTRIAN.

(May 24, 1918, 8.43 p. m.) Yesterday the Italians repeatedly attacked our positions on ZUGNA TORTA and in the ERSCH Valley after heavy long range artillery fire.

The first two attacks broke down under the efficient fire of our batteries. The attackers fled in disorder to their trenches. In the third attack the Italians barely reached our positions. The 3d Bohemian Kaiser's Riflemen rushed out of their trenches and threw themselves upon the enemy with their usual bravery. The hand-to-hand fighting ended in complete victory for our troops. The attacker was everywhere repulsed, a last nest of Italians being cleared out during the night.

The same ill-success attended three raids upon our positions on MONTE ASOLONE. Here also the enemy was each time thrown back.

Thus the fourth year of the Italian robber-war has begun with serious reverses.

SUMMARY OF AIR INFORMATION

CHANGES IN LOCATION OF UNITS

RIVER LYS-VIMY REGION			
6th Bombing Squadron . . . . . (7th, 8th and 9th Flights).	Marquain . . . . .	May 20 . . . . .	Machine shot down, R. A. F. Last identified at Matigny (Moreuil-Noyon region), Apr 24.
MOREUIL-NOYON REGION			
37th Pursuit Flight . . . . .	Forward area . . . . .	Apr 28 . . . . .	Document R. A. F. Last identified in Laon region, Jan. 29.
1st Bombing Squadron . . . . . (1st, 2nd and 3rd Flights).	Etreux . . . . .	May 20 . . . . .	Prisoner's statement, R. A. F. Last identified by French in forward area (same region), May 1.

AIRDROMES

Region	Confirmed		Removed	
	Sheds.	Hangars.	Sheds.	Hangars.
Flanders	10	12	4	17
River Lys-Vimy	4	33	4	1
Vimy-Bapaume	6	14	..	8
Bapaume-Moreuil	..	..	..	5

INTERROGATION OF A PRISONER

FROM VIII<sup>TH</sup> FRENCH ARMY  
CIRCUMSTANCES OF CAPTURE

At 8.00 A. M., May 19th, 2nd Lieut. Scheibe, observer, and Lance Corporal Kirschbaum, pilot, members of the Mosaic Section of Army Detachment "C", left their airdrome at Mars-la-Tour for the purpose of photographing railroad stations and junctions of the lines, Toul-Neufchateau and Nancy-Neufchateau, where the enemy suspected the traffic to be important, as Neufchateau is considered the principal railroad center in rear of the Lorraine front.

Our lines were crossed near Flirey at about 5,200 meters. On arriving near Toul, at an altitude of 5,500 meters, the motor commenced to over-heat, lost its oil, and missed fire. The machine headed for the ground in a vrille, but at about 2,000 meters straightened out and the motor started again. Wishing to avoid the anti-aircraft batteries of Toul and Nancy, the observer ordered the pilot to oblique towards the east in the hopes of being able to cross the lines near Avricourt. In the meantime, the machine had been under constant fire of anti-aircraft batteries, and the observer, noticing that the motor was again weakening, gave the signal to land. He threw out two films which he had taken previous to reaching Toul. While descending he was attacked by three Spads, from which he tried to defend himself by use of his back turret ; as they reached the ground, the landing wheel broke and the machine capsized. Lieut. Scheibe was wounded in the leg and was taken prisoner before being able to destroy the machine or the camera, against the capture of which he had been particularly cautioned.

MOSAIC SECTION OF ARMY DETACHMENT "C"

This section is charged solely with the photographic missions prescribed by Army Headquarters. It is quartered in the Mars-la-Tour airdrome, together with the 64th and 65th Pursuit Flights. It normally consists of three Rumpler machines, with proper crews and personnel, commanded by Lieut. Tod. One machine was recently put out of commission under circumstances which the prisoner apparently did not know. It has not yet been replaced, deliveries on this type being very slow.

The pilot says the Rumpler with 260 h. p. Mercedes motor answers all requirements of long distance reconnaissance work, but states that the pilot's field of vision is greatly lessened by the radiator which rises above the front motor.

The machines of this section are equipped with Goerz cameras of a new model arranged with electrical apparatus to permit the taking of moving pictures. According to the observer, this device has been under experiment for some time without satisfactory results ; and there are still difficulties to overcome, as it does not operate well except when the machine has good horizontal stability.

The section mainly performs reconnaissances of the rear areas of the Commercy-Toul-Nancy sector, but occasionally takes photographs of front line positions, as it is able to cover in a given time an area five or six times the size of that covered by an ordinary reconnaissance flight.

64TH AND 65TH PURSUIT FLIGHTS

These units, which are also at Mars-la-Tour airdrome, consist of about ten Albatros D-5 and Pfalz machines each. These flights patrol the front between Verdun and Pont-a-Mousson both singly and in groups. The pilots are not satisfied with their machines, especially the Pfalz, which they claim climbs slowly, and loses speed at high altitudes. They regard the Spad as superior to the Albatros D-5.

The observer claimed that these pursuit flights had a relatively high number of victories considering the quietness of the sector. It was admitted that our pursuit units are dreaded by hostile flyers, especially in the region of Bois de Mort Mare and towards Flirey. They have the reputation of being more active between St. Mihiel and Pont-a-Mousson than to the north of St. Mihiel.

298TH RECONNAISSANCE FLIGHT

According to the prisoners this flight is assigned to the divisions between Essey and Pont-a-Mousson.



## ANTI-AIRCRAFT MACHINE GUNS WITH ARTILLERY

FROM R. A. F. SUMMARY OF AIR INTELLIGENCE, MAY 21, 1918

A prisoner recently captured near Hangard states that since the beginning of the offensive, two machine guns for anti-aircraft defence have been allotted to each battery ; one machine gun remains with the ammunition column and the other is attached to the battery in action.

NOTE. This confirms information obtained from a captured order, regarding the defence of batteries against our low-flying machines.

## NEW ENGINES

FROM R. A. F. SUMMARY OF AIR INTELLIGENCE, MAY 21, 1918

A prisoner states that a new airplane engine, built by the Rapp Works, is under test ; this appears to be a 200 h. p. stationary engine with a device similar to that on the Maybach to give extra air at heights. It is stated to be lighter than other stationary engines at present in use.

## NEW MACHINE GUN

FROM R. A. F. SUMMARY OF AIR INTELLIGENCE, MAY 21, 1918

A new type machine gun, made by the Siemens-Schuckert Works, is stated by a prisoner to have recently been tried in machines of the 1st Pursuit Squadron and to have given great satisfaction. These guns are fired through the propeller and are actuated by an improved type interrupter gear. The rate of fire is 1,400 rounds per minute. A special arrangement for clearing jams is fitted.

## LUMINOUS METAL

FROM A. E. F. SUMMARY OF INTELLIGENCE, MAY 23, 1918

A highly luminous metal called Radium Massa is a German war article, the export of which is strictly forbidden. It is mixed with line and used on the sights of rifles, on chronometers and on registers of airplanes to facilitate night firing ; it is also used on airships and airplanes at night in order that German aircraft may be distinguished from Allied aircraft. It is applied over glue. Its price in Germany is 80 marks per gram.

## SUMMARY OF OFFICIAL COMMUNIQUE

MAY 25, 1918

### AMERICAN.

(May 25, 1918, 9. p. m.) Yesterday in Picardy our troops executed a successful silent raid and inflicted on the enemy a number of losses in killed and prisoners.

There is nothing else of importance to report.

### FRENCH.

(May 25, 1918, morning.) We repulsed two hostile raids during the night, one S. of HANGARD Woods and the other in the VOSGES.

Our detachments and patrols made several successful raids into the enemy's lines W. of NOYON, near EPLY and in WOEVRE. We took a number of prisoners.

There is nothing to report from the rest of the front.

(May 25, 1918, 8.45 p. m.) There is nothing to report beyond intermittent activity of the artillery N. and S. of the AVRE.

AVIATION. On May 22 and 23, four hostile planes and two captive balloons were shot down by our pilots. It is confirmed that five additional German planes were destroyed in aerial combat between May 16 and on May 21.

On May 22 and 23, and during the night of May 22 our bombing squadrons dropped 30,000 kgs. of projectiles on rail-road stations, billets and aviation fields in the hostile zone. Fire were reported in the station at MONTESCOURT and HIRSON and serious damage on the aviation field at CAPY.

### BRITISH.

(May 24, 1918, evening.) Under cover of a violent artillery barrage the enemy carried out a raid last night in the neighborhood of BUCQUOY. A few of our men are missing.

British and French patrols brought back prisoners from several points on the front.

There is nothing else to report.

AVIATION. The long spell of fine weather ended on May 23 at about 11 a. m. During the morning several reconnaissances were carried out and eight tons of projectiles were dropped on the enemy's billets and airdromes in the neighborhood of TOURNAL, which were used by German machines for night raids.

Three hostile machines were shot down in air fights and two others forced to land disabled. Three of ours are missing. During the night in spite of a very heavy wind our machines dropped more than seven tons of bombs on the billets in the neighborhood of PERONNE, FRICOURT and BAPAUME, as well as on the barracks and woods in the SOMME region. All our machines returned.

On May 24 almost one ton of bombs was dropped on the railway line and factories of HAGONDANGE, 19 km. N. of METZ. Our machines were attacked above their objective by hostile airplanes and by anti-aircraft guns, the fire of which was well sustained. Nevertheless all our machines returned uninjured.

(May 25, 1918, 10.15 a. m.) We carried out a raid last night on the enemy's trenches near HAMEL, N. of ALBERT. Our troops took more than 40 prisoners and two machine guns.

We also made a successful raid N. of LENS and took some prisoners.

The hostile artillery showed activity yesterday evening in the region E. of BETHUNE on which it directed a bombardment of gas shells. Its activity increased during the night in the STRAZEELE Sector.

(May 25, 1918, afternoon.) Last night our troops penetrated the enemy trenches in the neighborhood of HAMEL N. of ALBERT, captured more than 40 prisoners and two machine guns. Our troops made a successful local attack N. of LENS and took several prisoners. The bombardment of gas shells was intense last evening E. of BETHUNE. During the night artillery activity increased in the sector of STRAZEELE.

(May 25, 1918, night.) The enemy's artillery was active today in the VILLERS-BRETONNEUX region.

ITALIAN.

(May 25, 1918, 5 p. m.) The artillery of both sides showed activity between the BRENTA and the PIAVE and S. of ZENZON. There was scattered fire on the rest of the front. On the southern slopes of the SASSO ROSSO repeated hostile attempts to attack caused effective intervention on the part of our batteries and resulted in lively and prolonged actions.

In the ASOLONE region our patrols destroyed a hostile outpost and captured arms and materiel.

Hostile forces in rear of the ASIAGO Plateau were bombed by British aviators. Five hostile machines were brought down and a sixth forced to land.

GERMAN.

(May 25, 1918, 12.55 p. m.) WEST FRONT. Artillery fighting during the day, which was wet and stormy, remained moderate. In connection with hostile local attacks during the night N. W. of KEMMEL Hill and N. and W. of ALBERT the artillery fighting was intermittently intense. The enemy's attacks broke down at all points under heavy losses. Near HAMEL we repulsed the enemy in counter-attack. His assault troops were in general broken up under our fire before reaching our lines.

AVIATION. The crew of a German observation plane, Lt. Eisenmenger, and a Vizefeldwebel shot down four machines out of a string of six British one-seater battle planes.

(May 25, 1918, 8.33 p. m.) There is nothing new to report from the theaters of war.

AUSTRIAN.

(May 25, 1918, 8.41 p. m.) The fighting in the ZUGNA region decreased considerably yesterday. Attacks by hostile reconnaissance patrols on the ASIAGO Plateau and the lower PIAVE were broken up. The enemy's artillery fire damaged several houses in RIVA. More than 30 hostile airplanes dropped bombs upon FELTRE; one civilian was killed and eight wounded. Otherwise little damage was done. Field pilot acting officer Kiss, one of our most successful pilots, was shot down in an air fight, but his body was recovered.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### MOREUIL-NOYON REGION

2nd Pursuit Flight.....	S. of Ham.....	May 21.....	Prisoner's statement, R. A. F. Last identified in Denain area (Vimy-Bapaume region), Mar. 18.
68th Pursuit Flight.....	S. of Ham.....	May 21.....	Prisoner's statement, R. A. F. Last identified at Mont d'Origny (same region), May. 22.
24th Reconnaissance Flight .....	Fourmies area .....	Feb. 1918.....	Document, R. A. F. Last identified in Russia, Dec. 1917.

## IDENTIFICATIONS

### RIVER LYS-VIMY REGION.

291st Reconnaissance Flight ....	Lille area.....	May 18.....	Document, R. A. F.
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### MOREUIL-ROYON REGION.

223rd Reconnaissance Flight ....	S. of Ham.....	May 21.....	Prisoner's statement, R. A. F.
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### LAON REGION.

50th Pursuit Flight .....	Toulis .....	May 21.....	Prisoner's statement, R. A. F.
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## AIRDROMES

Region.	Confirmed.		Removed.	
	Sheds.	Hangars.	Sheds.	Hangars.
Flanders.....	1	..	32	1
River Lys-Vimy.....	..	5	..	..
Vimy-Bapaume .....	4	5	..	5
Bapaume-Moreuil.....	..	2	..	26
Moreuil-Noyon .....	6	58	..	17

## NEW GERMAN BOMB

FROM R. A. F. SUMMARY OF INTELLIGENCE, MAY 22, 1918

A captured document shows that the enemy has produced a new type of bomb to be dropped from low flying machines. This is known as the "Mouse bomb for low-flying airplanes" (*I fla. Maus*). It weighs two lbs. and bursts at a height of 2' 6" from the ground. From the description of the bomb rack and gear given in the document, it appears that two-seaters will carry 25 of these bombs.

## GERMAN AIR TACTICS IN THE KEMMEL HILL REGION, APRIL 22-30, 1918

FROM SUPPLEMENT TO FRENCH XTH ARMY BULLETIN, MAY 10, 1918

For operations between the Wytschaete-Poperinghe Road and the village of Meteren, exclusive, the enemy had massed large forces in the region of Lille. During the days preceding the attack, he prevented access to his line by strong patrols of from six to 20 combat planes. Strict orders had been given to photograph our lines and our rear areas. Distant reconnaissance flights were frequent. Relatively few ranging flights were observed.

During the attacks the infantry airplanes were very strongly protected. It is certain the enemy's air forces were larger, aggressive, and provided with machines of the most recent models.

## SPECIAL ARRANGEMENT OF AN AVIATION FIELD

FROM B. R. FRENCH ARMIES OF NORTH, MAY 22, 1918

A photograph of an aviation field northeast of Halluin shows a series of nine small black points in strict alignment, which seem to be small cavities surrounded by a white trace, probably the result of light excavations. Another photograph covering the same field shows seven small airplanes, each one of them placed on one of these black points with wings projecting. Interrogation of aviators was made to learn the subject of this arrangement and to find out if it were peculiar to certain flights. This would enable identification of these flights in the future. Any further information on the subject is requested.

## SUMMARY OF OFFICIAL COMMUNIQUE

MAY 27, 1918

### FRENCH.

(May 27, 1918, 11 a. m.) In the latter part of the night the Germans began a very violent bombardment on the entire region between PINON Forest and RHEIMS. In the morning a hostile attack was launched on a very wide front between these two points. The French and British troops are resisting the German thrust with their usual valor. The battle is in progress.

Artillery showed lively activity during the night in CHAMPAGNE, on the right bank of the MEUSE, in APREMONT Forest and in WOEVRE. The Germans launched several local attacks. In APREMONT Forest the attack was repulsed after fighting in which the enemy suffered losses. Two other attempts in the region of LIMEX, N. E. of BADONVILLER, also broke down. Two prisoners remained in our hands.

(May 27, 1918, 9 p. m.) The battle has continued all day with extreme violence on a front more than 40 kilometers from the region of VAUXAILLON to the edge of BRIMONT. The enemy masses, engaged with our first line troops, pushed without regard for their losses toward the Valley of the AISNE which certain of their elements gained at the end of the day in the region of PONT D'ARCY. Some Franco-British troops echeloned in depth withdrew methodically and with perfect liaison, making the enemy pay very dearly for his first inevitable success and assuring by their step by step resistance the efficient use of the reserves.

Artillery fighting continued very active on the two banks of the MEUSE in the region of St. MIHIEL and on the LORRAINE front. An enemy raid to the E. of FAYE-EN-HAYE was repulsed.

#### BRITISH.

(May 26, 1918, 9 p. m.) AVIATION. On May 25, flights were only possible during short periods of clear weather, of which we took advantage to drop 300 bombs on the billets near ARMENTIERES and MERVILLE, on the munition depot at VARSSEMAELLE and on the docks at BRUGES. In the course of air fights eight hostile machines were brought down and two forced to land disabled; another was shot down by our infantry machine guns. All our machines returned.

During the night it was possible to carry out bombardments and six tons of bombs were dropped on PERONNE, BAPAUME and MARICOURT. All our machines returned.

(May 27, 1918, 10.15 a. m.) Early this morning the enemy launched vigorous attacks after bombardment of great intensity on very wide fronts against the French and British troops between RHEIMS and Soissons and against the French troops between LOCRE and VOORMEZEELE.

Yesterday and last night German artillery showed considerable activity on the British front.

#### GERMAN.

(May 27, 1918, 2.10 p. m.) WEST FRONT. In the course of a successful operation S. W. of METELEN we captured British prisoners.

Artillery activity on the battle front was not renewed until the afternoon. Hostile artillery was particularly active in the KEMMEL region, along the N. bank of the LYS, between ARRAS and ALBERT, and on the W. bank of the AVRE.

Reconnoitering activity continued lively.

(May 27, 1918, 8.36 p. m.) In the battle sections in Flanders and along the LYS, on the battlefield on both sides of the SOMME and along the AVRE artillery combats have become sharper.

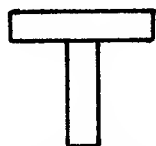
S. of LAON the battle for the CHEMIN DES DAMES has been under way since early this morning. The troops of the German Crown Prince stormed the ridge along its whole length and are now fighting along the AISNE.

#### AUSTRIAN.

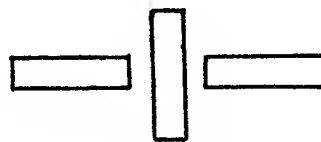
(May 27, 1918, 8.41 p. m.) Following reconnaissance actions of May 25 the Italians yesterday attacked our positions S. of the TONALE PASS; they were supported by intense artillery and trench mortar fire. The attack succeeded in pushing our lines back somewhat but a further advance by the enemy was prevented.

# PANEL SIGNALS FOR USE IN CONTACT WORK.

## 3<sup>RD</sup> GERMAN ARMY, JULY 1917.



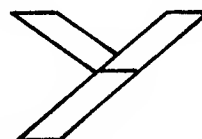
WE ARE HOLDING THE FRONT LINE



ENEMY HAS PENETRATED OUR CENTER



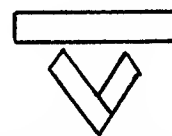
WE ADVANCE



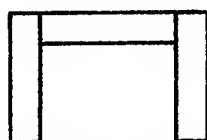
ENEMY ATTACK REPULSED



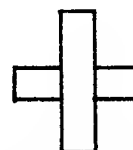
UNDERSTOOD



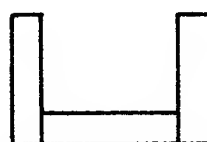
COUNTER ATTACK UNSUCCESSFUL



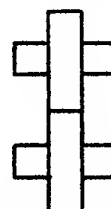
ENEMY PREPARING TO ATTACK



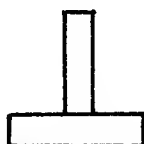
BARRAGE FIRE



SUPPORT REQUIRED



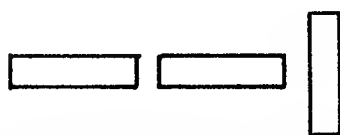
FIRE CLOSER ON OUR LINES



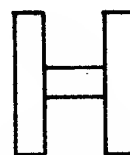
LIFT ARTILLERY FIRE



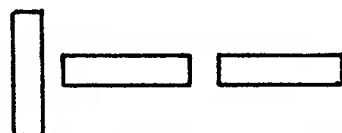
AMMUNITION REQUIRED



ENEMY HAS PENETRATED ON OUR RIGHT



HAND GRENADES



ENEMY HAS PENETRATED ON OUR LEFT



MINENWERFER SHELLS

48 3 2 50 1

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

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# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### BAPAUME-MOREUIL REGION.

5th Pursuit Flight .....	Nurlu area .....	May 25.....	Prisoner's statement, R. A. F. Last identified by French in Laon region, March, 1918.
76th Pursuit Flight .....	Suzanne .....	May 25.....	Machine shot down, R. A. F. Last identified in Lille area, April 24, 1918.
273d Reconnaissance Flight.....	Framerville.....	May 10.....	Prisoner's statement, R. A. F. Last identified in Verdun region, March 20, 1918.

## IDENTIFICATIONS

### BAPAUME-MOREUIL REGION

46th Pursuit Flight .....	Cappy.....	May 22.....	Machine shot down by French.
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### LAON REGION

14th Pursuit Flight .....	Clermont-les-Fermes....	Jan. 30.....	Document, R. A. F.
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## AIRDROMES

Region.	Confirmed.		Removed.	
	Sheds.	Hangars.	Sheds.	Hangars.
Flanders.....	7	..	1	7
River Lys-Vimy.....	9	6	..	6
Moreuil-Noyon.....	1	35	..	20

## GERMAN PARACHUTE FLARES

FROM FRENCH 1ST ARMY BULLETIN, MAY 25, 1918

German aviators have recently used a parachute bomb called *Leuchtbombe mit Fallschirm* in connection with night bombing operations. This is cylindrical in shape, has a diameter of 10 cm. and is made of two sizes, one 60 cm. and one 90 cm. high. It contains a magnesium compound which lights when the fuse is properly set at a height of from 300 to 400 meters above the ground, and burns for about two minutes. The fuse is marked Dopp Z 08 (*Doppel Zunder-mark* 1908).

NOTE.—This fuse is a combination time and percussion. Its housing is of illuminum and was originally intended for use with high velocity shrapnel. It proved unsatisfactory for this purpose and is now used only on aircraft flares. The time ring is set at the figure corresponding to the height from which the bomb is to be dropped.

## SHORTAGE OF PERSONNEL

FROM SUMMARY OF AIR INTELLIGENCE, R. A. F., MAY 27, 1918

A prisoner states that there is a shortage of efficient scout pilots ; the chief reason is that new pilots are sent to the scout schools after a hurried training in Germany, and are then sent to pursuit flights at the front ; formerly, the majority of scout pilots possessed previous experience at the front in two-seater units, but this source of supply is now not available owing to heavy casualties and a consequent scarcity of two-seater pilots.

The military authorities are now taking steps to have pilots more thoroughly trained at scout schools, and some of the inferior pilots in pursuit flights are being exchanged for experienced two-seater pilots who have gone through a course of instruction in aerial fighting.

## MARKING ON TWO-SEATER—WOEVRE SECTOR

A hostile two-seater was observed by two of our pilots to be marked with a large black cross set in a white circle and to have a bright orange fuselage.

## LIAISON BETWEEN GERMAN AIRPLANES AND THE GROUND

The following general principles prescribed for liaison work between German airplanes and the ground, have been compiled from translations of captured documents.

Liaison between the airplanes and the ground is maintained by means of light signals, wireless telegraphy and panels. Of these three the panel method seems to give the best results for infantry contact work. Strips varying between one meter by .80 and 1.20 x .60 meters are recommended. These panels are to be used freely without fear of drawing hostile artillery fire. The contact plane passes back calls for barrage or fire for effect from the lower units, which constantly keep in mind the importance of their positions to contact machines. It is suggested that work of this class be practiced at least twice a week. The infantry machine, which is most useful after telephonic communication is impossible, must be known to the divisional troops and to divisional headquarters. The latter inform contact machines of new reliefs so that aviators may establish liaison with each battery.

In urgent cases, artillery machines relay messages to the three independent batteries in each division.

These are usually charged with firing on moving targets such as columns of troops, artillery and transport, indicated by airplanes during an engagement.

The infantry pilot is designated by the abbreviation "Ifi" and his work is described by the new verb "Ifien".

In the region S. of the Oise, the infantry contact plane is under the direction of the First Section Divisional Staff of the Infantry.

Light signals by flares, stars, rockets and Morse lamp are also found effective. German aviators recently captured by the French state that the ground cloth method is being employed to a lesser extent.

The men in the front lines are usually supplied with magnesium flares by the Corps Pioneer Park. This will burn from one to three minutes and red has been found satisfactory. Very lights are used principally in calling for barrage fire, and usually are fired by an officer or non-commissioned officer detailed by him for this purpose. Signal lamps and heliograph are usually found in the 2d or 3d lines.

A sketch found in possession of a German aviator has indicated that the use of luminous signals from the earth to the airplane is now considered essential for night flying. The following are used by a German unit opposite the French Vth Army front :

- (a) Aerial lamp signal used :
  - Anti-aircraft section at Dandry Farm (E. of Crepy) —
  - Anti-aircraft section at Haudreville Farm —
  - Anti-aircraft section at the Old Mill (S. W. of Sissonne) —
  - Anti-aircraft section at Chaourse (N. W. Montcornet) —
- (b) Signal Sections and Anti-aircraft Defense :
  - Arnigny—every two minutes—3 shots.
  - Laon—every two minutes—4 shots.
- (c) Signal for Aerial Reconnaissance :
  - A Very light with one white star.
- (d) Signal of a machine seeking direction :
  - One Very light with a white star.
  - One green and red light.
- (e) Signal indicating "Message understood" :
  - A Very light with a white star, and two green lights.
- (f) Distress Signal :
  - A Very light with a white star and a red light.
- (g) Landing Signal :
  - "Way Clear"—a white light.
  - "Way not Clear"—a red light.
- (h) Dummy landing places :
  - Two white lights followed by a green.

## SUMMARY OF OFFICIAL COMMUNIQUE

MAY 30, 1918

### AMERICAN.

(May 26, 1918, 9 p. m. No. 12.) In the course of patrol encounters our troops drove back the enemy and inflicted a number of casualties.

(May 27, 1918, 9 p. m. No. 13.) In PICARDY, after violent artillery preparation, hostile infantry detachments succeeded in penetrating our advanced positions at two points. Our troops counter-attacked, completely expelling the enemy and entering his lines.

In the WOEVRÉ a strong hostile raiding party was repulsed with heavy losses in killed and wounded.

In LORRAINE hostile gas shell bombardments of some intensity occurred. The day was quiet in the other sectors occupied by our troops.

In the course of air combats this morning our aviators shot down a hostile machine.

(May 28, 1918, 9 p. m. No. 14) This morning in PICARDY our troops, attacking on a front of one and a quarter miles, advanced our lines and captured the village of CANTIGNY. We took 200 prisoners and inflicted on the enemy severe losses in killed and wounded. Our casualties were relatively small. Hostile counter-attacks broke down under our fire. In LORRAINE and in the WOEVRÉ artillery of both sides continued active. Early in the day our aviators shot down a hostile machine.

(May 29, 1918, 9 p. m. No. 15.) In the CANTIGNY salient we have consolidated our positions in spite of heavy artillery and machine gun fire. Renewed counter-attacks broke down under our fire.

In LORRAINE we repulsed three raids during the night, taking several prisoners and killing a number of the enemy. There and in the WOEVRÉ the artillery of both sides has been continuously active. It is established that on May 27 our aviators shot down two hostile machines instead of one as reported.

(May 30, 1918, 9 p. m.) The enemy has been again completely repulsed by artillery and infantry action in attacks against our new positions near CANTIGNY. Artillery fighting continues active there and in LORRAINE where it includes the use of gas shells. There is nothing else of importance to report.

### FRENCH.

(May 30, 1918, 11.00 a. m.) The battle continued during the night without stopping. Our troops hold the outskirts W. of SOISSONS with energy and the enemy was unable to debouch in spite of repeated attempts.

Further south fighting of extreme violence developed in the region of the road from SOISSONS to HARTENNES and on the front from FERE-EN-TARDENOIS to VEZILLY, where our troops, supported by reserves, are opposing the advance of the enemy with tireless tenacity.

On the right the Franco-British troops have broken all assaults and held their positions on the front from BROUILLET to THILLOIS, as well as N. W. of RHEIMS.

(May 30, 1918, 9 p. m.) The battle continued today with sustained violence on the entire front. Our troops holding the roads W. of SOISSONS have prevented all progress of the enemy on that side.

To the S. we are firmly holding the left bank of the CRISE.

In the center the intensity of the battle has not diminished. The Germans have captured FERE-EN-TARDENOIS and VEZILLY and have increased their efforts in the direction of VILLE-EN-TARDENOIS.

On our right, as well as N. W. of REIMS, we are perceptibly maintaining our positions.

AVIATION. Our air service has taken part in the present battle with endurance and boldness beyond all praise. Our



aviators combatted with a very aggressive and very numerous enemy. Flying at a low altitude they attacked the enemy's troops with machine-gun fire, carried out very advanced reconnaissances over the lines of the enemy and played an important part in the liaison service.

On May 27, 28 and 29, 19 German machines and two captive balloons were destroyed in air fights. Twenty-three hostile machines were forced to land badly disabled.

Our bombing service dropped 23 tons of projectiles during the night of May 27-28 on the bridges and crossings of the Ailette and of the Aisne, and on the billets of GUIGNICOURT and JUVINCOURT. On the following night and day they dropped 37 tons of projectiles on the enemy's convoys and troops on the march from the railway stations of LAON, FISMES and SAINT-GILLES.

Heavy explosions and fires were observed in the railway stations of FISMES and COUCI-LES-EPPES.

A munition dump was blown up at FISMES.

On the night of May 29-30 six German machines were shot down by our anti-aircraft defence guns.

#### BELGIAN.

(May 30, 1918, morning.) Artillery was active near NIEUPORT, MERCKEM and LANGEMARCK. We carried out successful counter-battery fire. The enemy's long range guns continued shelling the cantonments in our rear zone, especially at ADINKERKE, POLLINEHOVE and FORTOP.

#### BRITISH.

(May 29, 1918, 9.10 p. m. Continued.) AVIATION. On May 28, the fine weather enabled our airplanes and balloons to work usefully all day. In addition to doing artillery liaison and photographic work, our airplanes dropped 25 tons of bombs during the day on the billets, dumps, railway lines and airdromes behind the enemy's lines.

On the entire British Front, 13 German machines were destroyed in the course of air-fights and four others forced to land disabled. Five of ours are missing.

Bombardments continued during night of May 28-29. Five tons of bombs were dropped on various objectives, and particularly on billets of ARMENTIERES and railway station of VALENCIENNES. One of our night bombing planes is missing.

On May 29 a number of our bombing machines attacked THIONVILLE and effectively dropped one ton of bombs on the station and storage tracks. At the same time, other machines dropped projectiles on the railway station and barracks of METZ-SABLONS. Although our machines were attacked from the ground and in the air, they returned without suffering damage.

(May 30, 1918, morning.) Last night the enemy attacked the position known as Fortlet of Road A. N. W. of FESTU-BERT, but was completely repulsed.

We undertook a successful local operation in the neighborhood of MERRIS, slightly improving our line and capturing some prisoners and a machine gun.

In the neighborhood of LOCON our troops raided the hostile trenches last night and brought back prisoners.

The enemy's artillery showed activity E. of VILLERS-BRETONNEUX and in the sector of HINGES and ROBECQ.

#### GERMAN.

(May 30, 1918, 2.35 p. m.) WEST FRONT. At many points on the battle fronts between the YSER and the OISE fighting activity increased and local infantry combats occurred.

The attack of the battle armies of the German Crown Prince advanced victoriously. In hard fighting N. of the Aisne, near CRECY-AU-MONT, JUVIGNY and CUFFIES ground was gained. Brandenburg troops have taken SOISSONS. S. of the VESLE the new front which was being formed by the French broke under the constant attacks of our divisions. After obstinate resistance we threw the enemy back beyond the line VILLEMONTAIRE—FERE-EN-TARDENOIS—COULANGES—BROUILLET—BRANSCOURT. The forts on the N. W. front of RHEIMS have fallen. The northern parts of LA NEUVILLE and BETHENY have been taken. The number of prisoners has increased to more than 35,000 and the quantity of captured artillery and other war materiel is immense. Guns of all kinds, even railway artillery of the largest calibers, were captured. The impetuous advance of our assault troops prevented the enemy from removing the abundant war supplies stored in the captured terrain. Large stocks came into our hands in SOISSONS, BRAISNE and FISMES. Extensive ammunition dumps, railway trains, hospital establishments with many hospital equipments came into our possession. Hangars with machines ready to fly and aviation material were captured.

Fighting activity in the army groups of von Gallwitz and Duke Albrecht increased only intermittently.

AVIATION. Our aviators shot down 38 hostile machines in the last three days. First Lieutenant Berthold achieved his 29th air victory. Lieutenant Roeth, in his flight from DIXMUDE to S. of YPRES, shot down in flames five hostile captive balloons.

(May 30, 1918, 8.32 p. m.) S. of FERE-EN-TARDENOIS we are fighting towards the MARNE.







# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### RIVER LYS-VIMY REGION

256th Reconnaissance Flight .... Linselles area..... May 8..... Document, R. A. F. Last identified in Flanders, Apr. 12, 1918.

### LAON REGION

32d Pursuit Flight ..... With VIIth German Army. May 27..... Machine shot down by French. Last identified in Moreuil-Noyon region, Apr. 16, 1918.  
44th Reconnaissance Flight ..... With VIIth German Army. May 28..... Prisoner's statement, French. Last identified in Verdun region, May 3, 1918.

### WESTERN FRONT (UNLOCATED)

73d Pursuit Flight ..... Feb. 26 ..... Moved to W. Front. Formerly at Halle and Saale (Germany).

## IDENTIFICATIONS

### MOREUIL-NOYON REGION

203d Reconnaissance Flight..... May 27..... Machine shot down by French.

### LAON REGION

209th Reconnaissance Flight ..... May 28..... Machine shot down by French.

## AIRDROMES

Région.	Confirmed		Removed	
	Sheds.	Hangars.	Sheds.	Hangars.
Flanders .....	..	..	1	..
River Lys-Vimy .....	..	..	..	9

## FURTHER DETAILS ON ENGINES FOR GIANT AIRPLANES

It is reported by the French that experiments are being carried out on a 600 and 300 h. p. Maybach engine for use in Giant machines. The former is said to have given good results except that the cooling system requires further adjustment. The 300 h. p. engine is similar to the 240 h. p. Maybach engine used in Zeppelins, but has eight cylinders.

## NEW GERMAN BOMB

FROM SUMMARY OF AIR INTELLIGENCE, R. A. F., MAY 28, 1918

It is reported that a 1,000 kg. bomb (2,200 lbs.) has passed its final tests and will soon be issued to bombing squadrons.

## ENEMY AERIAL ACTIVITY BETWEEN MAY 22 AND MAY 28

### GENERAL

May 22.—Cloudy weather prevented aerial activity except for deep reconnaissances between Noyon and Chalons, and the vicinity of Belfort.

May 23.—Most noticeable between Scarpe and Somme, and Moreuil-Noyon Sector.

May 24.—Sixty hostile airplanes were seen in Moreuil-Noyon sector, otherwise quiet.

May 25.—Bad weather kept hostile airplanes behind lines.

May 26.—Foggy and cloudy on all fronts.

May 27.—Great activity in Flanders, and from Moreuil to Chalons. Considerable bombing between Noyon and Soissons.

### ALSACE AND LORRAINE

The past week has been marked by unusual activity of the German airplanes between Verdun and Belfort, though this activity cannot be considered as a definite indication of a contemplated German offensive on this front. American squadrons have been successful in preventing reconnaissances and destroying hostile airplanes. From statements of prisoners it appears that this aggressiveness in a "quiet sector" has been noted. Therefore the air activity of the past week may only mean that the German Air Service has received orders to make a determined effort to find out what is going on behind our lines.

## EFFECT OF ALLIED BOMBING

Information received through neutral countries indicates that the German people are showing a desirable reaction to Allied bombing. The fact that the Germans have attached so much importance to raids on Paris and London proves they are susceptible to the same treatment. The number of airplanes held behind the front for protection of their commercial centers seems to be steadily increasing.

## GERMAN AERIAL PREPARATION FOR AISNE OFFENSIVE

Preparation by aerial reconnaissance for the present offensive appears to have commenced on May 13, with some feeble patrolling around Monts. From that day up to May 27, although activity on other

fronts was frequently very feeble between Chalons and Noyon, there was consistent aerial reconnaissance by the enemy.

May 14, activity on the rest of the front was moderate. Around Pontoise, Chauny, and Corbeny-Brimont, 52 pursuit and 26 observation planes were observed.

May 15, deep reconnaissances were made to Creil and Paix; there was considerable patrolling in the region of Monts, and three deep reconnaissances around Revigny, Chalons, and Epervay.

May 16, aerial activity was concentrated between Noyon and Anizy, and deep reconnaissances were carried out around Compeigne, Soissons and Epervay.

May 17, the activity was much the same as on May 16.

May 18, there were deep reconnaissances on Epervay, Soissons and Chalons, and May 19, on Attiche and Soissons.

May 20, numerous pursuit and observation planes were seen around Soissons. The activity on the other fronts was feeble.

May 21, there was less activity around Soissons, but practically none on any other part of the front except Belfort. Observation planes were reported over Presles and Soissons during the night, while reconnaissances were also made on Epervay.

May 22, the most notable reconnaissance was on Epervay, Chalons and Compeigne.

May 23, activity was centered around Anizy, Chauny and Souain.

May 24, 25, and 26, weather prevented significant activity on any front.

There is a great similarity between the air operations indicated above and those which preceded the Kemmel Hill offensive. (Summary of Information No. 57, and Summary of Air Information No. 21.) From these certain deductions are drawn:—

(a) The German Staff keeps compiled sufficient information of Allied rear areas upon which to base plans for the offensive.

(b) Before an attack reconnaissances are made to determine changes.

(c) An aerial barrage is established to mask the concentration of troops.

## SUMMARY OF OFFICIAL COMMUNIQUEES

JUNE 1, 1918

### AMERICAN.

(June 1, 1918, 9 p. m.) The day was quiet at all points occupied by our troops. Our aviators shot down a hostile machine.

### FRENCH.

(June 1, 1918, 12.30 p. m.) The enemy's thrust continued yesterday during the evening and the night with increased violence on the front from SOISSONS to CHATEAU THIERRY.

In the region of SOISSONS and on the line from CHAUDUN to VIERZY our troops, continuing their counter-attacks with tireless energy, threw back the masses of the enemy launched against this front, gaining territory everywhere and taking several hundred prisoners.

S. of SOISSONS the enemy was thrown back on the CRISE. Further south CHAUDUN and VIERZY were taken and lost several times but finally remained in our hands after hard fighting.

The battle was not less violent in the region of CHOUY and NEULLY-ST. FRONT. Our troops broke up the enemy's attacks and held their lines immediately E. of those villages.

Along the N. bank of the MARNE the enemy has pushed forward his advanced elements from the northern and eastern outskirts of CHATEAU THIERRY as far as VERNEUIL.

On our right lively fighting developed on the road from DORMANS to RHEIMS.

The situation is unchanged N. W. and N. of RHEIMS.

(June 1, 1918, 9 p. m.) The day was marked by a series of powerful German attacks on the entire front between the OISE and the MARNE. Our troops, alternately advancing and retreating, gave way only at certain points before forces much superior in number after inflicting heavy losses on the assailants.

Between the OISE and the AISNE we have retired to the northern outskirts of the wood of CARLEPONT and on the heights to the W. of AUDIGNICOURT as far as FONTENOY. All the attempts of the enemy to the W. and S. of SOISSONS as far as the N. of VIERZY were futile.

Farther to the S. the battle assumed a particular violence at points on the OURCO. The enemy captured CHOUY and NEULLY-ST. FRONT. Our troops are fighting along the line VILLERS-ELLON-NAUROY-BRIEZ-MOUSTIER-TREPAGNY. We hold CHATEAU THIERRY.

On the N. bank of the MARNE there is no change.

To our right, in the region of the road from DORMANS to RHEIMS, we have virtually maintained our position, particularly to the N. of VILLE-en-TARDENOIS, in spite of the constant pressure of the enemy.

The situation remains the same to the N. W. and N. of RHEIMS.

To the S. E. of that city a violent hostile attack supported by tanks succeeded in throwing us back momentarily from FORT LA POMPELLE to the railroad but an immediate counter-attack by our troops gave us back the fort and completely re-established our positions. We took more than 200 prisoners and captured four tanks.

AVIATION. On May 31, during the day, the struggle in the air continued along the entire battle front with great intensity. Our airplanes attacked hostile machines with their customary dash destroying 23 and driving down 14 seriously damaged.

The enemy's captive balloons, continually harassed and often compelled to descend, have been greatly hampered in their work of observation. Six of them were destroyed.

Our observation planes incessantly reconnoitered the enemy's lines, informing our command in regard to the enemy's movements. Our reconnaissances both by night and day have been carried out as far as VERVINS, GUISE, LE-CHATEAU, HIRSON.

In the entire zone of battle our squadrons have fired on the German troops on march and have caused them very serious losses.

Our bombing planes have shown equal devotion and marvelous endurance. During the day of the 31st and during the following night 66 tons of bombs were thrown upon troops, convoys, stations and aviation fields of the enemy particularly in the Valley of the AISNE, on FISMES, FERRE-en-TARDENOIS, OULCHY-le-CHATEAU, Forest of St. GOBAIN, etc. Some machines made as many as three trips in the same night. The results observed were very satisfactory.

Two German machines were brought down by our anti-aircraft artillery on May 31.

### BRITISH.

(June 1, 1918, 9.55 a. m.) A hostile raid last night E. of VILLERS-BRETONEUX was repulsed. In AVELUY Woods, N. of ALBERT, a local action ended to our advantage. In the course of these engagements we captured some prisoners.

Early this morning German artillery showed activity in the sectors of VILLERS-BRETONEUX and HEBUTERNE; it also was aggressive during the night S. and W. of LENS and near GIVENCHY.

(June 1, 1918, night.) In the course of the fighting in the neighborhood of AVELUY Wood, reported this morning, our troops advanced their line by successive local attacks and captured more than 30 prisoners. On the remainder of the British front there is nothing to report beyond the usual artillery activity on both sides.

The number of German prisoners captured by us in May is 1,158, including 29 officers.

ITALIAN.

(June 1, 1918, 4.50 p. m.) Between Lake GARDA and the ADIGE on the ASIAGO Plateau and astride the BRENTA, the artillery duels were at times extremely intense.

The fire of British batteries caused a large conflagration to break out in the enemy's depots at MEZZASELVA-ROZZO.

Hostile patrols were dispersed by fire at BAITO-MONTICELLO, TONALE and at MONT CORNO, VALLARSA.

Four of the enemy's airplanes were brought down in air fighting.

GERMAN.

(June 1, 1918, 1.45 p. m.) WEST FRONT: Army group of Crown Prince Rupprecht. Artillery fighting showed increase at many points. Local attacks by the enemy S. of YPRES were unsuccessful.

Army group of German Crown Prince. Troops of Generals Hofmann and von François S. of the OISE and S. W. of CHAUNY threw the enemy out of strong positions near CUTS and S. of BLERANCOURT. In violent local fighting along the N. bank of the AISNE we advanced as far as NOUVRON and FONTENOY.

The French made desperate counter attacks with fresh divisions, brought up by railway and motor trucks, against our troops pushing forward across the SOISSONS-HARTENNES road. During the evening the hard fighting was decided in our favor. We followed the withdrawing enemy as far as the heights E. of CHAUDUN, VIERZY and BLANZY. We have crossed the road from SOISSONS to CHATEAU THIERRY on both sides of the OURCQ and, while constantly breaking down hostile resistance, have reached the heights of NEUILLY and N. of CHATEAU THIERRY. Between CHATEAU THIERRY and E. of DORMANS we stand along the MARNE.

From the MARNE to W. of RHEIMS we took by assault the line VERNEUIL-OLIZY-SARCY-CHAMPIGNY.

In the course of yesterday's fighting we again captured several thousand prisoners and abundant material.

AVIATION. During the last few days we have shot down 36 hostile airplanes. Lieutenant Menkhoff achieved his 28th, Lieutenant Puetter his 25th and Lieutenant Kroll his 24th air victory.

(June 1, 1918, 8.31 p. m.) On the front from NOYON to CHATEAU THIERRY we have gained ground.

AUSTRIAN.

(June 1, 1918, 8.33 p. m.) Nothing of importance to report.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### MOREUIL-NOYON REGION

247th Reconnaissance Flight ....	Nesle .....	May 30.....	Machine shot down near Villers-Tournelle. Last identified in Ba-paume-Moreuil region, March 24.
18th Army Aircraft Park .....	Guisse .....	May 31.....	Prisoner's statement, R. A. F. Last identified in Ham area, May 3.

### RHEIMS REGION.

1st Protective Flight .....	Rheims area .....	May 27.....	Machine brought down, R. A. F. Last identified north of Lille, April 30.
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## IDENTIFICATIONS

### MOREUIL-NOYON REGION

2nd Pursuit Flight .....	Nesle .....	May 15.....	Prisoner's statement, R. A. F.
23rd Reconnaissance Flight ....	Eppeville .....	May 19.....	Prisoner's statement, R. A. F.
29th Reconnaissance Flight ....	.....	May 31.....	Machine shot down by French.
233rd Reconnaissance Flight ....	Beaufort .....	May 31.....	Machine shot down, R. A. F.

## ACTIVITY OF GERMAN AVIATION DURING THE ATTACK OF MAY 27, 1918, ON KEMMEL HILL

FROM FRENCH BULLETIN OF INFORMATION, ARMIES OF THE NORTH, MAY 31, 1918

Preceding, and on May 26 especially, there was little hostile activity in the air, and few planes were observed behind the German lines. May 27 was marked by a sudden increase in the number of pursuit machines, 225 being observed. A short time before the attack there was machine gun fire on our trenches, but during the attack airplanes acted only for protection, and were not aggressive. Each artillery and infantry plane had an escort of pursuit planes, and observation balloons were protected by four patrols of five to seven monoplanes.

A little after the attack began, hostile patrols of from 15 to 20 planes made observations over our lines for a possible counterattack by our aviators. From 11 in the morning until 4 in the afternoon there was no hostile activity on our own side of the line, and our reconnaissances over their territory were not disturbed. At the end of the day, however, the pursuit patrols reappeared and the general impression is that there was complete liaison and coordination of effort between Infantry, Army and Pursuit machines. The enemy did not exhaust himself at any time by endeavoring to obtain control of the air.

As previously noted Fokker triplanes were less used, the Albatros D. 3 and D. F. W.'s being most employed.

## ARMAMENT ON GOTHA MACHINES

FROM SUMMARY OF AIR INTELLIGENCE, R. A. F., JUNE 1, 1918

The Gotha is still armed with three machine guns. The top rear gun as well as the lower rear gun can now fire through the tunnel in the fuselage, and most machine gunners prefer to use the top gun whenever possible, as the lower gun is very awkward to use.

## LONG DISTANCE RECONNAISSANCE UNITS

FROM SUMMARY OF AIR INTELLIGENCE, R. A. F., JUNE 1, 1918

Captured documents show that an Army long distance reconnaissance and photographic flight is known as an "L. B." (which according to a prisoner means "Licht Bild," i. e., photograph) flight. These letters are placed after the number of the unit.

## GERMAN AIRMEN

FROM SUMMARY OF AIR INTELLIGENCE, R. A. F., JUNE 1, 1918

Captain Reinhardt commands the 1st Pursuit Squadron, formerly Captain von Richthofen's command.

## AUSTRIAN ARMORED PLANE

An Austrian aviator brought down on the Italian front has stated that the Austrians are developing a new armored airplane for infantry work.

## SUMMARY OF OFFICIAL COMMUNIQUE

JUNE 4, 1918

### AMERICAN.

(June 4, 1918, 9 p. m.) In the fighting N. W. of CHATEAU-THIERRY our troops broke up an attempt of the enemy to advance to the S. through NEUILLY Woods and by a counterattack drove him back to the N. of these woods. On the MARNE front a German battalion which had crossed the river at JAULGONNE was counterattacked by French and American troops and forced to retreat to the right bank. It sustained severe losses in killed and prisoners. Patroling was active in PICARDY and LORRAINE. In the WOEVRÉ we shelled the enemy's positions, using gas.



## FRENCH.

(June 4, 1918, 11 a. m.) Between the OISE and the AISNE the enemy was held by the vigorous resistance of our troops and made no progress.

Between the AISNE and the OURcq the battle continued with constant obstinacy during the evening and night. Beginning at 7 p. m., violent attacks occurred in the region of PERNANT—SACONIN—MISSY-AUX-BOIS—TROESNES. PERNANT fell into the hands of the enemy after determined defense which cost the assailants heavy losses. Farther S. our troops yielded a small amount of terrain W. of SACONIN and MISSY-AUX-BOIS, FAVEROLLES, attacked by the enemy, was held by us, as well as TROESNES.

The fighting was not less lively in the region S. of the OURcq. Supported by considerable artillery, the enemy directed his effort against MOSLOY—VEUILLY-LA-POTERIE—TORCY—BOURESCHES. We recaptured MOSLOY in a counter-attack. VEUILLY-LA-POTERIE was the scene of violent fighting and the village, after having passed from hand to hand, remained in possession of the Germans. American troops checked the advance of the German forces who attempted to penetrate the VEUILLY Woods and by a magnificent counterattack threw them back N. of the woods. Further S. the enemy was unable to make any gain.

On the MARNE front a hostile battalion which had made its way to the left bank at JAULGONNE was counterattacked by Franco-American troops and driven back to the other bank after having suffered heavy losses. The gangway was destroyed and 100 prisoners remained in our hands.

There is no change on the rest of the front.

(June 4, 1918, evening.) The enemy appreciably diminished his activity during the day and confined himself to local attacks.

Hostile artillery showed activity N. of the AISNE, between the AISNE and the OURcq and in the region N. of RHEIMS. N. of MOULIN-SOUS-TOUVENT our troops improved their positions and made some gain in terrain.

In the region of LONGPONT the Germans succeeded in penetrating temporarily the Forest of RETZ but our counter-attacks forced them back immediately to the eastern outskirts.

There is no change on the rest of the front.

AVIATION. On June 3 our bombing squadrons forced a crossing over the hostile lines and shot down two captive balloons and five German machines. On the same day 21 tons of projectiles were dropped on troops in movement, artillery columns, and supply trains. Twenty-eight tons were dropped on the same objectives in the night of June 3-4.

## BRITISH.

(June 3, 1918, 11 p. m., continued.) AVIATION. On June 2 British machines worked actively in liaison with the artillery, took many photographs, dropped 18 tons of bombs and fired with their machine guns on various objectives. Eight German machines were destroyed in the course of air-fights and 14 forced to land disabled. Three of ours are missing.

During the night of June 2-3 we dropped eight tons of projectiles on the railway stations of LE CATEAU, ST. QUENTIN and VALENCIENNES. All our night bombing machines returned.

(June 4, 1918, 10 a. m.) A successful raid was made yesterday evening W. of MERVILLE and we took some prisoners.

Hostile detachments attacked one of our new positions W. of VIEUX BERQUIN but they were repulsed and left prisoners in our hands.

German artillery showed considerable activity early this morning between ALBERT and SERRE.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### RIVER-LYS-VIMY REGION

36th Protective Flight .....	Houplin.....	June 1.....	Prisoner's statement, R. A. F. Last identified at Ronchin (same region), May 3, 1918.
231st Reconnaissance Flight ....	Seclin.....	May 21.....	Prisoner's statement, R. A. F. Last identified at Neuville-sur-l'Escaut (Vimy-Bapaume region), March 26, 1918.
29th Pursuit Flight .....	Seclin area .....	June 1.....	Prisoner's statement, R. A. F. Last identified by French at Bersee (same region), Jan. 10, 1918.

### BAPAUME-MOREUIL REGION

34th Pursuit Flight .....	Foucaucourt.....	May 30.....	Prisoner's statement, R. A. F. Last identified by French at Villeselve (Moreuil-Noyon region), April 1918.
77th Pursuit Flight .....	Foucaucourt.....	May 30.....	Machine shot down, R. A. F. Last identified in Lille area, April 24, 1918.
78th Pursuit Flight .....	Foucaucourt.....	May 30.....	Machine shot down, R. A. F. Last identified in Lille area, April 24, 1918.
78th Pursuit Flight .....	Foucaucourt.....	May 30.....	Prisoner's statement, R. A. F. Last identified by the French at Buhl (Lorraine), May 3, 1918.

### MOREUIL-NOYON REGION

245th Reconnaissance Flight ....	Ham area.....	June 1.....	Prisoner's statement, French. Last identified in Laon region April 16, 1918.
278th Reconnaissance Flight .....	Dury.....	June 1.....	Prisoner's statement, French. Last identified by French at Montmedy. May 3, 1918.

## IDENTIFICATIONS

### RIVER LYS-VIMY REGION

7th Reconnaissance Flight .....	Seclin area .....	June 1.....	Prisoner's statement, R. A. F.
32nd Reconnaissance Flight.....	Houplin.....	June 1.....	Machine shot down, R. A. F.

### BAPAUME-MOREUIL REGION

40th Reconnaissance Flight .....	2nd German Army....	June 1.....	Machine shot down, R. A. F.
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### MOREUIL-NOYON REGION

63rd Pursuit Flight .....	Ham area.....	June 1.....	Prisoner's statement, French.
23rd Reconnaissance Flight .....	Ham area.....	June 1.....	Prisoner's statement, French.
29th Reconnaissance Flight .....	Ham area.....	June 1.....	Prisoner's statement, French.
39th Reconnaissance Flight .....	.....	June 1.....	Machine shot down by French at Villers-Cotterets.
203rd Reconnaissance Flight .....	Ham area.....	June 1.....	Prisoner's statement, French.
226th Reconnaissance Flight .....	Dury.....	June 1.....	Prisoner's statement, French.
247th Reconnaissance Flight .....	.....	May 31.....	Machine shot down by French, W. of Montdidier.

## ENEMY RECONNAISSANCE TACTICS

FROM SUMMARY OF AIR INTELLIGENCE, R. A. F., JUNE 2, 1918

A prisoner states that on May 20, the 77th Pursuit Flight received orders to detail as many machines as possible to escort a Rumpler two-seater on a strategical reconnaissance north of the Somme, and 20 km. behind the lines; seven machines were tolled off. The orders in question mentioned that this reconnaissance was extremely important, and that the co-operation of scouts was required in view of the fact that single machines had found it exceedingly difficult to penetrate the British line patrols.

## ENEMY POLICY

FROM SUMMARY OF AIR INTELLIGENCE, R. A. F., JUNE 3, 1918

A prisoner states that, about the middle of May, a number of protective flights and also some reconnaissance units which in battle are engaged in low flying to support the infantry attack, were withdrawn from the forward area of the St. Quentin sector and sent to rest at airdromes in back areas.

It is interesting to note that units were similarly withdrawn to rest prior to the Somme offensive (March 21). No units were actually identified in back areas, but a number of reliable reports to this effect were received, while one airdrome was located (at Maubeuge). This appeared to accommodate two or more flights.

**ARMORED MACHINES**

FROM SUMMARY OF AIR INTELLIGENCE, R. A. F., JUNE 3, 1918

On May 3, the 36th Protective Flight was equipped with six two-seaters (Halberstadt and Hannover). It is now equipped with three Halberstadt two-seaters and three Albatros armored machines.

NOTE.—This flight is now located at Houplin.

**NEW TYPES OF GERMAN MACHINES**

FROM SUMMARY OF AIR INTELLIGENCE, R. A. F., JUNE 2-3, 1918

**FOKKER BIPLANE**

One of these machines has now been captured by the French.

A short description of this machine is given below :—

	Ft.	Ins.
Span of top plane.....	25	0
Top plane has an extension of 2 ft. 3 ins. at each end over the bottom plane.		
Chord of top plane.....	5	6
Gap .....	4	0
Overall length .....	22	6
Tail plane and rudder similar to the triplane, but a fin is also fitted.		
Engine, 160 h.p. Mercedes.		
Armament, two '08 pattern (Spandan) machine guns firing through the propeller.		

The Fokker biplane is reported to be better than the triplane as regards manoeuvrability, horizontal speed and ceiling ; its climb is inferior to that of the triplane.

**ROLAND D.6.A. SCOUT**

A prisoner states that he recently saw a Roland D.6 a scout at Valenciennes ; this machine was flown by Lieut. Kissenberth, the O. C., 23rd Bavarian Pursuit Flight (Epinoy airdrome). The machine is described as being fitted with a stationary engine, having straight planes, one pair of "V" type interplane struts on either side of the fuselage near the wing tips. The pilot's seat is described as being rather far back and the fuselage very deep.

The machines are generally painted in a dark color ; no details as regards to performance are available.

NOTE. A new type of scout, which corresponds to the description given above, was seen by R. A. F. pilots in the Somme area on May 29.

**NEW SIEMENS-SCHUCKERT SINGLE-SEATER**

The same prisoner states that the Siemens-Schuckert works have built a new single-seater machine, of which extremely good reports have been received ; the machine is said to be fitted with a rotary engine, possibly the new 160 h. p. Siemens-Schuckert engine reported on various occasions by prisoners. It is stated that this scout has been accepted for use at the front, but will not appear in any number for some two or three months.

**SUMMARY OF OFFICIAL COMMUNIQUE**

JUNE 6, 1918

**AMERICAN.**

(June 6, 1918, 9 p. m.) In an attack N. W. of CHATEAU THIERRY this morning our troops, in conjunction with the French, advanced our line S. of TORCY about a mile, capturing prisoners and inflicting severe losses in killed and wounded.

There was lively artillery fighting in LORRAINE last night our batteries executing effective reprisal and neutralization fire. There is nothing else of importance to report.

**FRENCH.**

(June 6, 1918, 11 a. m.) Our troops yesterday evening continued driving back the hostile groups which had succeeded in crossing the OISE E. of SAMPIGNY. We took about 100 prisoners.

N. of the AISNE we appreciably improved our position N. and W. of HAUTE BRAYE. Fifty prisoners remained in our hands.

Lively artillery actions occurred in the regions of LONGPONT, VEUILLY-la-POTERIE and W. of RHEIMS.

(June 6, 1918, 9 p. m.) Minor operations continued during the day at several points on the front. W. of LONGPONT our troops, assisted by tanks, made progress and took some prisoners. Between the OURcq and the MARNE an attack made by Franco-American troops permitted us to advance our lines about a kilometer in the region of VEUILLY-la-POTERIE and BUSSIARES ; 270 prisoners, of whom ten were officers, remained in our hands.

Between the MARNE and RHEIMS the Germans attempted a series of local attacks upon CHAMPLAT which completely failed. More to the N. the Germans succeeded in seizing BLIGNY and heights to the S. A counterattack by British troops gave us back the heights. To the S. W. of ST. EUPHRAISE we also retook during the day a little ground captured this morning by the Germans. On the rest of the front there is nothing to report.

AVIATION. On June 5, 19 hostile airplanes were brought down or forced to land disabled. A German captive balloon was set on fire the same day. In the night of June 5-6, 25 tons of explosives were dropped by our bombing planes on the cantonments, depots, stations and convoys in the enemy's rear zones. A large fire, following an explosion, was observed in the station of FERÉ-en-TARDENOIS.

**BRITISH.**

(June 5, 1918, evening, continued.) AVIATION. On June 4 the weather was cloudy and the German air service was not active on the British front. One hostile machine was brought down by our airplanes and another forced to land disabled. One German balloon was destroyed. In addition to reconnaissances and liaison work with the artillery. British airplanes carried out bombing operations, dropping 14 tons of bombs during the day and the following night. They all returned.

(June 6, 1918, 9.40 a. m.) Last night the enemy again attempted to penetrate our positions S. W. of MORLANCOURT. He was repulsed with losses.

The Germans succeeded in rushing one of our outposts yesterday afternoon near BOYELLES. Two of our men are missing.

The enemy attempted raids during the night N. of LENS, N. of BETHUNE and E. of the Forest of NIEPPE. He was repulsed each time and suffered losses. Hostile artillery was active in the STRAZEELE sector.

## SUMMARY OF AIR INFORMATION, No. 25, JUNE 7, 1918.

(June 6, 1918, night.) Local fighting, in which hostile attacks were repulsed by French troops, took place last night near LOCRE. There is nothing further to report.

### BELGIAN.

(June 5, 1918, evening.) During the night after violent artillery preparation a hostile party was able to penetrate temporarily certain advanced elements in the RAMSCAPPELLE zone. Our outposts were immediately reoccupied and some prisoners remained in our hands.

The artillery showed considerable activity during the day in the DIXMUDE and MERCKEM zone.

AVIATION. Second Lieutenant W. Coppens shot down a German balloon S. of SARREN. This is the fifth balloon set on fire by this aviator within three weeks.

(June 6, 1918, 9.46 p. m.) After artillery preparation two hostile raids on our advanced posts of REIGERSVLIET and STUYVEKENSKERKE failed. One of our patrols brought in prisoners near WIELTJE in the vicinity of St. JULIEN. The artillery combat was fairly lively against the front N. and S. of FORT de KNOCKE.

### ITALIAN.

(June 6, 1918, 4.35 p. m.) The artillery struggle was more active at intervals astride the BRENTA and on some portions of the PIAVE front. Elsewhere fighting was confined to harassing and patrol actions.

### GERMAN.

(June 6, 1918, 12.50 p. m.) WEST FRONT. Army Group of Crown Prince Rupprecht. Artillery activity showed varying intensity. Prisoners were captured in the course of several reconnaissance combats.

Army Group of German Crown Prince. The situation on the battle front is unchanged. Local combats occurred W. of PONTOISE, N. of the AISNE and along the SAVIERES, in the course of which we captured hostile earthworks and trenches. Artillery fighting was active at many points. CHATEAU THIERRY was subjected to sustained fire of destruction by the French.

The prisoners and materiel captured by the army group of the German Crown Prince since May 27, as ascertained up to the present, are as follows; more than 55,000 prisoners, including 1,500 officers, more than 650 guns and considerably more than 2,000 machine guns.

AVIATION. In the last two days 46 hostile airplanes and four captive balloons were brought down. The Richthofen pursuit squadron shot down 15 hostile machines yesterday.

Captain Berthold and Lieutenant Menkhoff achieved their 21st, Lieutenant Loewenhardt his 27th, Lieutenant Udet his 26th and Lieutenant Kirstein his 21st and 22d air victories.

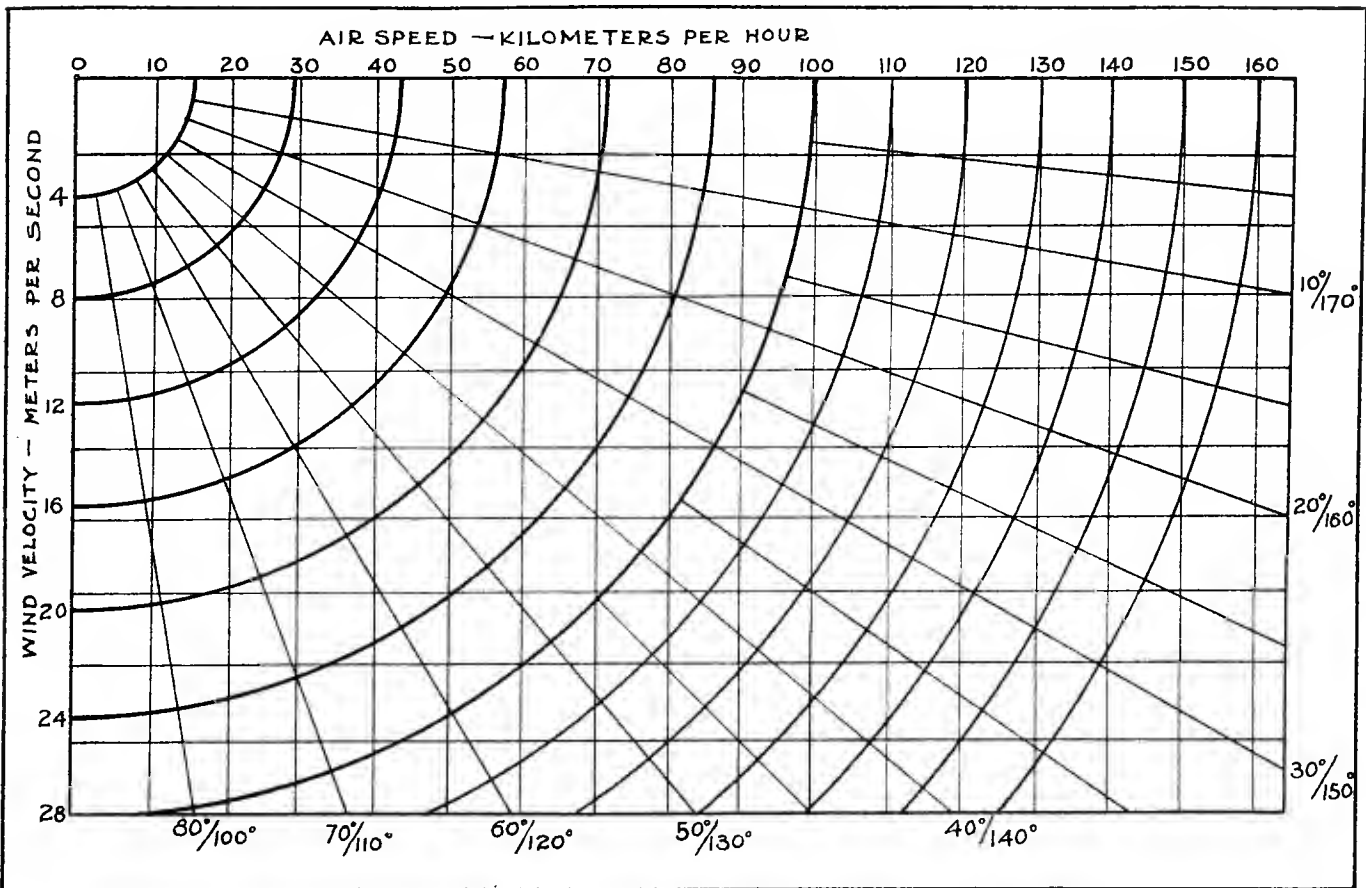
(June 6, 1918, 8.32 p. m.) There were local actions on the battlefield N. W. of CHATEAU THIERRY and along the ARDRE.

### AUSTRIAN.

(June 6, 1918, 12.50 p. m.) Sustained artillery fighting occurred along the Tyrolese and PIAVE fronts.

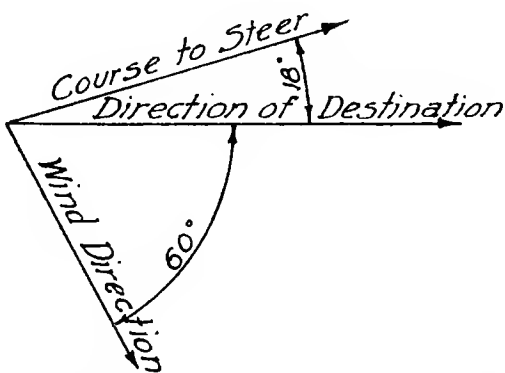
# GERMAN CHART

FOUND ON AN AIRPLANE BROUGHT DOWN ON FRONT OF VIII<sup>TH</sup> FRENCH ARMY

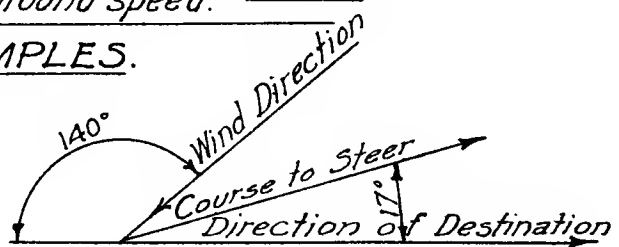


Place index finger of right hand on point of intersection of line of wind angle with wind velocity circle. Follow horizontally with little finger to intersection with air speed line. A line from 0 through this latter point gives the angle of adjustment of course to offset wind deviation. Sum or difference of speeds indicated by the two fingers gives ground speed.

## EXAMPLES.



Given:— Wind Velocity—12 m/s.  
Wind Angle—60°  
Air Speed—120 km/hr  
Found:— Adjustment Angle—18°  
Ground Speed—136 km/hr



Given:— Wind Velocity—14 m/s  
Wind Angle—140°  
Air Speed—120 km/hr  
Found:— Adjustment Angle—17°  
Ground Speed—68 km/hr.  
Note: Trigonometric solution of this example gives adjustment angle as 18° and ground speed as 66 km. per hour



# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### ALSACE REGION

75th Pursuit Flight ..... Habsheim ..... June 2, ..... French source. Last identified at Thugny (Rheims region), April 18, 1918.

### INTERIOR

7th Single Seater Battle Flight.... Crefeld..... May 10, ..... German press. Last identified at Mars-la-Tour (Woevre region), Dec. 1917.

## AIRDROMES

Region	Confirmed		Removed	
	Sheds.	Hangars.	Sheds.	Hangars.
Champagne .....	..	13	..	..

## EMPLOYMENT OF HOSTILE ANTI-AIRCRAFT SECTIONS

### FROM SUMMARY OF AIR INTELLIGENCE, R. A. F., JUNE 8, 1918

A prisoner captured by the French states that forward hostile anti-aircraft sections are grouped so as to form three lines of defense. The prisoner belonged to a section of the first line of defense, situated some three miles east of the lines, and consisting of two A. A. guns.

Anti-aircraft sections in the first line are in action in the day-time only and fire directing shots (*Richtfeuer*) to indicate the presence and position of our aircraft.

The sections in the second and third lines are available for both day and night work.

A. A. sections are connected by telephone to a central aircraft observation post (*Flugwache*), where reports are collected and warnings sent out.

## GIANT AIRPLANE

### FROM SUMMARY OF AIR INTELLIGENCE, R. A. F., JUNE 8, 1918

A machine of this type landed in French area, but was set on fire by the occupants. It is a four-engine biplane with both tractor and pusher propellers, carrying nine persons.

The following approximate dimensions were taken :

Span of main planes along rear main spar .....	136'	0"
Chord of top main plane .....	12'	5"
Gap .....	14'	0"
Overall length of central fuselage .....	66'	0"

## CONSTRUCTION :

*Fuselage.*—The fore part as far as the gunner's cockpit is of steel tubing ; the rear part has wooden longons and steel tubular vertical and cross struts braced with piano wire.

*Planes.*—Wooden spars (box type) and ribs, reinforced with steel tubular compression ribs and braced with steel cable.

*Tail unit.*—Biplane tail with three fins and three rudders.

*Undercarriages.*—One under each pair of engines, each having eight wheels, four on either side, and a single pair of wheels under the fore part of the fuselage.

## ENGINES :

Four 260 h. p. Maybach six-cylinder engines, situated between the planes. They are placed one behind the other in pairs on either side of the fuselage, two driving tractor and two driving pusher propellers.

## ARMAMENT:

Only two gun mountings could be found ; these were on a revolving turret round the gunner's cockpit aft and on either side of the circle.

No bomb racks could be found.

## APPEARANCE OF HANNOVER TYPE MACHINE

Our pilots report the presence on our front of a two-seater machine of the Hannover type possessing unusual maneuver ability and speed.

## NEW MARKINGS

Pilots on our front report the presence of enemy two-seaters marked with large white circles on the top wings. One plane was described as dark in color, while a second had a mottled lemon yellow fuselage and indistinct tail markings.

### DEVICE FOR AIRPLANE DESTRUCTION

FROM BULLETIN OF AERONAUTIC INFORMATION, ARMIES OF THE NORTH AND NORTHEAST, MAY 15, 1918

Further particulars on the device mentioned in S. A. I. No. 10, May 11, 1918, is that German machines are furnished with an explosive instrument rectangular in shape, 160 x 80 x 60, fixed by a number of bolts to the chassis for the motor. On the upper face of the box is a handle usually turned back and kept in place by a copper wire covered with lead. The following instructions are painted in black near the handle:

*"Vorsicht! Vorstecker nicht herausziehen. Lebensgefahr!"*

(Lookout! Don't pull out fuse pin. Danger!)

A clock fuse is started as soon as the handle is raised and explodes the device about five minutes later. The box contains charge of about 400 grammes of powerful explosive. It is well, therefore, when a German machine comes down and the aviators leave it hurriedly not to approach the plane for at least five minutes, and attention is called to the danger of inexperienced people handling this instrument.

### PROTECTION FROM AIR OBSERVATION

FROM SUMMARY OF AIR INTELLIGENCE, R. A. F., JUNE 7, 1918

An extract from a captured order of the 82d Res. Div. (in line north of Montdidier) is given below:

#### PROTECTION OF TRAFFIC FROM AIR OBSERVATION.

(a) All troop movements, other than ordinary reliefs, will be carried out at night. During the day, only such movements as the marching to and from drill grounds and the march from a railway station to the nearest town or village and vice versa will take place. In these cases no large columns or close formation will be formed.

Cover from observation by hostile airmen will always be taken immediately a hostile machine is seen.

(b) At night, all lighted localities will be carefully camouflaged.

(c) Vehicles and guns will not be parked in large numbers and will be protected from air observation.

(d) Newly arrived troops will follow roads and tracks normally used.

(e) No bivouac fires will be lit.

(f) There will be no increase in traffic during the day.

### THE 1st PURSUIT SQUADRON

FROM SUMMARY OF AIR INTELLIGENCE, R. A. F., JUNE 7, 1918

A German newspaper of May 19, quoting Army Orders, says:

"The Emperor has ordered that the pursuit squadron led by Rittmeister Freiherr von Richthofen, who was killed on April 21, shall in future be known as *Jagdgeschwader Freiherr von Richthofen, No. 1.*"

### SUMMARY OF OFFICIAL COMMUNIQUES

JUNE 11, 1918

#### AMERICAN.

(June 11, 1918, 9 p. m.) N. W. of CHATEAU THIERRY we were again successful in advancing our positions in the BELLEAU Wood. We captured 250 prisoners, of whom three were officers, and considerable materiel, including a number of machine guns and trench mortars.

In the WOEVRÉ our batteries executed effective neutralization and harassing fire.

#### FRENCH.

(June 11, 1918, 11 a. m.) Yesterday evening and during the night the enemy continued his pressure in the direction of ESTREES ST. DENIS and RIBECOURT.

On the left our troops offered effective resistance and the enemy was able to capture neither LE PLOYRON nor COURCELLES. The village of MERY was retaken by us yesterday at 10 a. m.

In the center the enemy's principal effort was on the line from BELLOY to MARQUEGLISE. A powerful attack, carried out with heavy effectives, succeeded at first in throwing us back as far as the ARONDE but by a magnificent counter-offensive our troops repulsed the enemy on the entire front and re-established their positions on the line S. of BELLOY and ST. MAUR, S. of MARQUEGLISE and VANDERLICOURT. On our right violent fighting occurred in the wooded region N. of DRESLINCOURT. The enemy who had gathered large forces in this region succeeded in reaching ANTOVAL, forcing our troops to withdraw their line of resistance to the west and south of RIBECOURT.

(June 11, 1918, 10.35 p. m.) The battle continued today between MONTDIDIER and the OISE. At the left our troops, supported by tanks, counter-attacked this afternoon on a front of 12 km. between RUBESCOURT and ST. MAUR. In spite of the determined resistance of the enemy we reached the southern edge of LA FRETOT, as well as the heights between COURCELLES and MORTEMER, and carried our lines more than two km. to the E. of MERY. We also retook BELLOY, the Wood of GENLIS and reached the southern edge of ST. MAUR.

The enemy, who suffered heavy losses, left more than 1,000 prisoners and several guns in our hands.

In the center the Germans, who had succeeded in advancing S. of the farm of LOGES and of ANTHEUIL, were driven back beyond these two points by our troops, acting in concert with neighboring units.

At the right the enemy, increasing his pressure, sought to gain the Valley of MATZ. Several violent hostile attacks launched on CHEVINCOURT were repulsed. The enemy succeeded in entering MACHEMONT and BETHANCOURT, which were sharply contested.

To the S. of the OURCQ American troops this morning brilliantly captured BELLEAU Wood and made 300 prisoners.

AVIATION. Our bombing airplanes continued their operations during June 10 in spite of the bad weather.

Groups of airplanes flying at low altitude over the most exposed points of the field of battle threw bombs on the enemy concentrations, dispersing his support troops and causing them considerable loss.

Certain airplanes made several trips during the day. Eight tons of bombs were used in this way, giving the best of results.

During the night of June 10-11, an active bombardment was carried out on the zone immediately behind the hostile front. Our squadrons threw 20 tons of bombs on convoys, cantonnements and railway stations. Two munition dumps were exploded, one in the region of CHAULNES, the other near SOISSONS. A fire was also reported in the station of FISMES. During June 10 four German airplanes and one captive balloon were shot down by our battle planes.



## BRITISH.

(June 10, 1918, evening, continued.) AVIATION. On June 9 our squadrons co-operating with the forces on the NOYON-MONTDIDIER battle front were constantly in action from morning until evening. Our bombing machines hindering the enemy's advance and with their machine guns harassed without ceasing the German troops and convoys; during the day strong scout patrols swept the battle zone under cover of our protecting squadrons flying at high altitudes. Among the objectives of our aviators was an airdrome in the neighborhood of ROYE where several hostile machines were set on fire, an ammunition depot which was blown up at MONTDIDIER, artillery teams and caissons at CONCHY, motor trucks at SAGNY and HANEVILLERS, infantry in the trenches and on the roads along the front and in rear of the lines.

On the British front the hostile air service was not very active but our machines until stopped by the rain did much artillery adjustment, and carried out reconnaissances and photographic missions.

One of our artillery planes forced a German two-seater to land on the aviation ground of the victor. Furthermore, 14 German machines were brought down and four forced to land disabled. One hostile balloon was set on fire. Four of our machines are missing.

(June 11, 1918, 10.25 a. m.) In the neighborhood of MORLANCOURT, Australian troops carried out a local operation with complete success. S. of the village our line was advanced about 800 meters on a front of more than 2400 meters. We captured 233 prisoners, 21 machine guns and one trench mortar.

In the course of successful raids carried out during the night N. W. of MORLANCOURT, S. of the SCARPE, and W. of the Forest of NIEPPE, we took prisoners captured two machine guns and inflicted heavy losses on the enemy.

The Germans made a raid on one of our posts in the AVELUY Woods and one of our men is missing.

Hostile artillery bombarded the region of LENS during the night with gas shells.

## ITALIAN.

(June 11, 1918, 4.40 p. m.) In VALLARSA, ASTICO Valley and on the lower PIAVE the enemy's artillery several times attempted to develop local fire activity. It was vigorously and effectively countered by our artillery on Mt. CORNO, in VALLARSA, in FRENZELLA Valley and at CORTELLAZZO.

Hostile infantry vainly attempted raids E. of CAPO SILE our patrols drove back the hostile garrison from the front lines and captured one machine gun, two trench mortars and other arms and war materiel. Five hostile airplanes were brought down in air fighting.

## GERMAN.

(June 11, 1918, 1.45 p. m.) WEST FRONT. Army Group of Crown Prince Rupprecht. The fighting which had remained moderate during the day became more active only on both sides of the SOMME. After a heavy increase in fire the enemy attacked during the evening between the ANCRE and the SOMME. The enemy's attack which penetrated along the road from CORBIE to BRAY was halted by counter-attack. On the rest of the front the assault broke down under heavy losses.

Army Group of German Crown Prince. In two days' fighting the attack by the Army of General von Hutier has reached its intended objective and has put us in possession of the high ground S. W. of NOYON. Our assault met an enemy prepared for our attack deeply organized and in a very strong position. The French divisions could nevertheless not withstand the impetuous attack of our troops. The divisions of the French reserve army which were brought up for united counter-attack were repulsed yesterday in hard fighting. On our right wing of attack the troops of General von Ottinger held against violent counter-attacks the enemy's lines captured S. of ASSAINVILLERS.

Troops of General von ... are fighting near COURCELLES and MERY and on both sides of the main road from ROYE to ESTREES ST. DENIS and have captured the crest of hills E. of MERY. They have penetrated the enemy's fourth line and have thrown him back on the ARONDE. In spite of the determined hostile resistance troops of General von Schoeler have fought their way across the MATZ. After capturing the heights of MARQUEGLISE and VIGNEMONT they pressed forward in unchecked attack as far as ANTHEUIL.

The corps of General Hofmann has penetrated, in constant fighting, the network of hostile trenches on the heights S. of THIESCOURT. We are now pushing forward on the slopes descending southward to the OISE, as far as RIBECOURT.

The number of prisoners has risen to more than 10,000 thereby bringing the total of prisoners captured by the Army of the German Crown Prince since May 27 to about 75,000. On the front from the OISE to RHEIMS the situation is unchanged. Renewed attacks by the enemy N. W. of CHATEAU-THIERRY were broken up with heavy losses.

(June 11, 1918, 8.31 p. m.) On the battlefield S. W. of NOYON renewed counter-attacks by the French were shattered with heavy losses.

## AUSTRIAN.

(June 11, 1918, 1.50 p. m.) Two Italian attacks along the lower PIAVE again broke down.

In the FRENZELLA Valley also hostile reconnaissance detachments were repulsed.

In ALBANIA, N. W. of KORCA the French have renewed their attacks.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### CHAMPAGNE REGION

296th Reconnaissance Flight .... Bouconville..... May 20..... French source. Last identified near Cugny (Laon region), April 7, 1918.

### LORRAINE REGION

12 Reconnaissance Flight ..... Morhange ..... June 1 ..... French source. Left Italy April 1, 1918. Unlocated since that date.

### ALSACE REGION

71st Pursuit Flight..... Mulhouse area ..... April 28 ..... Document, R. A. F. New unit.

### MOREUIL-NOYON REGION

218th Reconnaissance Flight..... Peronne-Ham-Roye area. June 5 ..... R. A. F., report. Last identified at Schlestadt (Alsace region), Feb. 22, 1918.

### LAON REGION

27th Protective Flight ..... Eboulou ..... May 25..... French source. Last identified in Woevre region, February 1, 1918.

244th Reconnaissance Flight \*... Fismes ..... May 25..... French source. Last identified at Higny (Verdun region), Oct. 1917.

## EMPLOYMENT OF MACHINE GUNS FOR ANTI-AIRCRAFT DEFENSE

### FROM SUMMARY OF INTELLIGENCE R. A. F. JUNE 9, 1918

A prisoner of the 3d Machine Gun Company, 56th Inf. Regt., recently captured by the French, had attended an anti-aircraft machine gun course of a fortnight's duration. The course comprised the study of airplane silhouettes, judging distance with the naked eye, and the firing of anti-aircraft machine guns without the employment of the circular foresight.

The same prisoner was on several occasions attached to the anti-aircraft detachment of the regimental train, especially since the Somme offensive, when the division was moving forward. Each machine gun company detached one or two machine guns with the necessary personnel. These machine guns followed the regimental train during the march and served as a protection in the event of an attack by a hostile airplane. When bivouacing at night, the machine guns were mounted round the park formed by the regimental train. These machine guns, which formed the anti-aircraft detachment of the regimental train, were provided with circular foresights.

## SUMMARY OF OFFICIAL COMMUNIQUEES

JUNE 13, 1918

### AMERICAN.

(June 13, 1918, 9.00 p. m.) Yesterday afternoon our troops N. W. of CHATEAU-THIERRY captured the last of the German positions in the BELLEAU Wood, taking 30 prisoners and a number of machine guns and trench mortars in addition to those taken on the preceding day. Early this morning the enemy launched heavy attacks on a front of more than one and one-half miles on the line BELLEAU-BOURESCHES. The attacks, which were preceded by intense artillery preparation and accompanied by a heavy barrage, broke down completely, leaving our positions intact. The losses of the enemy were very severe.

Last night our aviators bombed with good effect the station of DOMMAY BARONCOURT, N. W. of METZ. All our machines have returned.

### FRENCH.

(June 13, 1918, 11 a. m.) Yesterday evening and last night the enemy did not renew his attacks between MONT-DIDIER and the region of ANTHEUIL. Our troops have consolidated their positions. On our right our counter-attacks enabled us to throw the enemy back to the N. bank of the MATZ. We re-occupied LA CROIX RICARD Hill and MELICOCQ. About 100 prisoners and some machine guns remained in our hands.

Fighting continued violently between the AISNE and the Forest of VILLERS-COTTERETS. The Germans have advanced as far as the ravine W. of LAVERSINE and after hard fighting succeeded in gaining a footing in CŒUVRES and ST. PIERRE-AIGLE.

The enemy launched a violent attack on the front of BOURESCHES and BELLEAU Woods. American troops broke up the attack, inflicting serious losses on the assailants and holding their gains.

### BRITISH.

(June 13, 1918, night.) AVIATION. The British air service took part in the French counter-attack on the western portion of the NOYON battle-front. Our special patrols fought with hostile machines and bombed the German trenches, battery emplacements and lines of communication with vigor and unceasingly. Intense machine-gun fire was directed from a low altitude on the enemy's troops and transports within the region.

Ten German machines were destroyed during these operations and four forced to land disabled. We lost three of ours. Two of our machines reported missing yesterday have returned.

Since the beginning of the German attack in the NOYON sector on June 9 our squadrons co-operating with the French squadrons have dropped 21 tons of bombs and brought down 29 hostile machines. On the British front our airplanes and balloons have as usual regulated the fire of our artillery; they have also accomplished useful reconnaissance and photographic work. On this front two machines have been brought down and two forced to land disabled. One of our machines is missing.

On the French as well as on the British front we dropped 14 tons of bombs on June 11. During the night of June 11-12 our bombing machines vigorously attacked the railway lines at CAMBRAI and the billets at FREMICOURT, dropping four tons of projectiles. All our machines returned.

(June 13, 1918, noon.) We made a successful raid yesterday S. E. of ARRAS, inflicting heavy losses on the enemy. One trench mortar was captured and two others were destroyed.

During the night we carried out local operations successfully S. W. of MERRIS and E. of DICKEBUSCH. In the former sector our line was slightly advanced, we suffered very slight losses and captured some prisoners. In the region of DICKEBUSCH the French troops improved their positions in the neighborhood of RIDGEWOOD, taking 30 prisoners.

#### GERMAN.

(June 13, 1918, 1.15 p. m.) WEST FRONT. Army group of Crown Prince Rupprecht. Artillery fighting showed intermittent activity. Frequent infantry combats occurred.

Army group of the German Crown Prince. S. of NOYON the French launched new counter-attacks in force on both sides of the main road from ROYE to ESTREES ST. DENIS, but this assault also broke down under very heavy losses. More than 60 tanks are lying shattered on the battlefield. The number of prisoners has increased to more than 15,000. The captured guns, according to present information, amount to more than 150. In the repulse of the enemy's counter-attacks some of our guns which had been advanced into the foremost infantry lines fell into the hands of the enemy.

N. of the AISNE assault detachments penetrated the enemy's trenches. S. of the AISNE we attacked the enemy after heavy artillery preparation and threw him out of his lines E. of CUTRY to DOMMIERS and beyond those villages. N. of COURCY the rain along the SAVIERES was cleared of the enemy and we took more than 1,500 prisoners. Repeated hostile attacks N. W. of THIERRY broke down under heavy losses.

AVIATION. In the two last days 25 hostile machines were shot down. Captain Berthold and Lieutenant Menkhoff achieved their 33d, First Lieutenant Schleich his 29th and 30th, Lieutenant Vertjens his 20th and 21st, and Captain Reinhart his 20th air victories.

(June 13, 1918, 8.32 p. m.) The situation is unchanged on the various battlefronts. There was local fighting S. of YPRES, S. W. of NOYON and S. of the AISNE.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### FLANDERS

18th Pursuit Flight..... Machine shot down, R. A. F., June 6. Last identified in Cambrai area, May 16, 1918.  
3th Reconnaissance Flight..... Report, R. A. F. Last identified in Vimy-Bapaume region, Nov., 1917.

### RIVER LYS-VIMY REGION

14th Pursuit Flight..... Machine shot down, R. A. F., June 9. Last identified at Liesse, Jan. 30, 1918.

### VIMY-BAPAUME REGION

12th Pursuit Flight..... Report, R. A. F. Last identified in Bapaume area, April 24, 1918.  
42d Pursuit Flight..... Report, R. A. F. Last identified in Bapaume area, April 24, 1918.  
22d Reconnaissance Flight..... Report, R. A. F. Last identified at Caix, April 1918.  
34th Reconnaissance Flight..... Report, R. A. F. Last identified in Moreuil-Noyon region, April 22, 1918.

### BAPAUME-MOREUIL REGION

23d Protective Flight..... Prisoner's statement, R. A. F., May 21. Last identified in Flanders in September, 1917.

### MOREUIL-NOYON REGION

8th Pursuit Flight..... French source. Last identified in Cambrai area.  
19th Pursuit Flight..... Prisoner's statement, R. A. F., June 7. Last identified in Cambrai area, April 16, 1918.  
32d Pursuit Flight..... French source. Last identified in Laon region, May 27, 1918.  
13th Protective Flight..... Machine shot down, R. A. F., June 9. Last identified in Bapaume region, March, 1918.  
33d Protective Flight..... Prisoner's statement, R. V. F., May 30. Previously unlocated.

### LAON REGION

1st Pursuit Squadron..... Report, R. A. F., May 29. Last identified in Bapaume Moreuil region, May 16, 1918.  
1st Pursuit Flight..... Report, R. A. F. Last identified in Vimy-Bapaume region, March 8, 1918.  
9th Pursuit Flight..... Report, R. A. F., May 30. Last identified at Leffincourt, April, 1918.  
23d Pursuit Flight..... French source. Last identified at Epinoy, April 24, 1918.  
36th Pursuit Flight..... Machine shot down, R. A. F., May 29. Last identified in Bapaume area, March 22, 1918.  
60th Pursuit Flight..... Report, R. A. F., May 31. Last identified in Ham area, May 11, 1918.  
5th Protective Flight..... French source, June 1. Last identified in Ham area, May 31, 1918.  
20th Protective Flight..... French source, June 1. Previously unlocated.  
26th Protective Flight..... Prisoner's statement, R. A. F., May 30. Last identified in River Lys-Vimy region, May 3, 1918.  
39th Reconnaissance Flight..... Prisoner's statement, R. A. F., May 26. Last identified in Ham area, April 23, 1918.  
284th Reconnaissance Flight..... Prisoner's statement, R. A. F., May 20. Last identified in Vimy-Bapaume region, March 28, 1918.  
287th Reconnaissance Flight..... French source, May 28. Last identified in Moreuil-Noyon region, March 6, 1918.  
297th Reconnaissance Flight..... French source, May 30. Last identified in Moreuil-Noyon region, May 3, 1918.

## AIRDROMES—MEUSE TO SWISS FRONTIER

Many reports have been received relative to increases in airdromes on this front. French and British units photographed the area during May. It was shown that the capacity had been considerably increased at old airdromes, and that a number of new airdromes were under construction. The situation is as follows:

### MEUSE TO LINE VERDUN—THIONVILLE:

Eight occupied—capacity about 150 reconnaissance planes;  
Seven unoccupied—capacity about 80 reconnaissance planes and 24 bombing planes;  
Two under construction—capacity about 12 reconnaissance planes;  
Known capacity of region—about 266 machines;  
Now identified in region—about 50 machines.

### LINE VERDUN—THIONVILLE TO MOSELLE:

Three occupied—capacity about 72 reconnaissance machines;  
Three unoccupied—capacity about 42 reconnaissance machines;  
Four under construction—capacity about 78 reconnaissance machines;  
Known capacity of region—about 192 machines;  
Now identified in region—about 75 machines.

## MOSELLE TO LINE BADONVILLER—SAVERNE :

Nine occupied—capacity about 280 reconnaissance machines ;  
 One unoccupied—capacity about 12 reconnaissance machines ;  
 Five under construction—capacity about 18 reconnaissance machines and 48 bombing machines ;  
 Known capacity of region—about 358 machines ;  
 Now identified in region—about 150 machines.

## LINE BADONVILLER—SAVERNE TO SWISS FRONTIER :

Five occupied—capacity about 100 reconnaissance machines ;  
 Four unoccupied—capacity about 90 reconnaissance machines ;  
 Four under construction—capacity about 50 reconnaissance machines ;  
 Known capacity of region—about 240 machines ;  
 Now identified in region—about 120 machines.

In the foregoing outline, except those obviously intended for bombing units, consideration has only been given to airdromes within 35 kilometers of the present front. A number of new airdromes have been constructed further back, but these are believed to be intended for units used in defense against bombing raids. The strength in Alsace is accounted for by the fact that there are located there several establishments of prewar construction, which are used as training grounds for new units.

## LIAISON BETWEEN INFANTRY AND AIRPLANES

FROM FRENCH XTH ARMY BULLETIN, JUNE 9, 1918

The following two documents, one captured on the front of this Army, the other by a neighboring army, show the enemy's concern for establishing liaison between the infantry and the air service. These documents, which were issued by the Air Service addressed to the infantry, indicate by their tone the difficulty which the infantry aviators experience in effectively fulfilling their missions.

## A.—TRANSLATION OF A GERMAN DOCUMENT ISSUED BY THE 27TH GERMAN AIR SQUADRON AND CAPTURED BY A NEIGHBORING ARMY

"Infantrymen !

"Remember, when you are meeting with resistance in the course of the advance, that the aviator can come to your aid :

"1. The aviator can make known your position to the Command and to the artillery, so that you may be given support.

"2. The aviator can let you know what he observes within the enemy's line.

"3. The aviation can attack hostile batteries in action and hostile infantry with his machine gun.

"4. The aviator can direct the fire of our own batteries.

"5. You can call the aviator with your small radio stations.

"6. When the aviator approaches at a low altitude :

"(a) Indicate your command posts in accordance with the instructions regarding infantry airplanes.

"(b) Report information to the aviator by means of the regulation signal panels.

"(c) Indicate your advanced line by means of Bengal lights, rockets, or white panels."

## B.—TRANSLATION OF A GERMAN DOCUMENT, CAPTURED ON THE FRONT OF THIS ARMY, WITHOUT DATE OR INDICATION OF SOURCE, AND APPEARING TO BE A TRACT DROPPED BY A GERMAN AIRPLANE WITHIN ITS OWN LINES

FROM THE INFANTRY AVIATORS TO THE INFANTRYMEN

"When communication between you, your commanders or the artillery is cut off, we can inform them where you are, whether you still have ammunition and if you need assistance.

"We carry to the rear the news of your achievements, report upon the success of the attack and whether you are valiantly defending yourselves in a difficult position.

"We think of you. In order to bring you help, we do not fear storm, machine guns, or hostile airplanes. Most of the officers, non-commissioned officers and men who fly over you have themselves been infantrymen and know how urgent it is to have assistance when you need it. It is for this reason that we risk our lives for you. Assist us in accomplishing our difficult task.

"Let us know the location of your first line by using panels. If you are not supplied with them, light fire flares in the most advanced shell holes. Spread out newspapers or maps, wave a piece of cloth or even use visual signals.

"In the fighting before Arras, Bavarian infantrymen who had nothing with which to signal their presence, took off their coats and waved them and their light-colored shirts made them more visible. Our reports enabled assistance to be brought to them.

"In the fighting before Verdun, about 200 of you were surrounded by the enemy for three days and completely cut off from the rest of the infantry. Death or capture seemed certain. These men were discovered by infantry airplanes which dropped them ammunition and provisions and went in search of help. Three days later they were rescued by their comrades.

"The command posts must likewise get into communication with us by using the regulation signals. If ammunition is beginning to run low, a panel in the shape of an "M" will immediately be shown.

"We, the infantry airplanes, fly very low and are easily recognizable by the streamers attached to the tips of our wings. A white rocket from us means that we wish to communicate with you. When we are no longer flying in your vicinity, remove your panels to prevent mistakes."

## GERMAN AIR FORCES, JUNE 6 TO 12

## CHANGES IN LOCATION

The following additional flights have been located in the Laon region : six pursuit, four reconnaissance, and five protective. These were sent to the Aisne previous to the offensive of May 27. The pursuit flights were all drawn from the Bapaume-Moreuil region, and the other flights uniformly from northern armies.

# AIRDROMES.

Reports indicate construction is mainly in River Lys-Vimy, Rheims, and Champagne regions. Many structures have been removed from Flanders and the Moreuil-Noyon region.

# ACTIVITY.

During the first part of the week the enemy seemed most concerned in shielding his back areas from aerial reconnaissance, and used strong defensive tactics on all active fronts. At night he continued heavy bombing of lines of communication between Paris and the battle-front. In the latter part of the week infantry planes and strong combat patrols were active between Flanders and Rheims. Activity on the Woivre and Lorraine fronts against our air units has been conspicuously small. This might be attributed to poor visibility, but there are indications that pursuit flights have been transferred north, although confirmation has not been received.

## SUMMARY OF OFFICIAL COMMUNIQUEES

JUNE 16, 1918.

### AMERICAN.

(June 16, 1918, 9 p. m.) This morning in the WOEVRE the enemy executed a local attack against the left of our position. During the attack there was brisk artillery fighting. The assailants not only failed to penetrate our lines but were thrown back with severe losses and left several prisoners in our hands, of whom one was an officer. In the region of CHATEAU THIERRY two local attacks made by the enemy during the night on the line BOURESCHES-BOIS DE BELLEAU were easily broken up. Artillery on both sides continues very active in this region and in PICARDY.

### FRENCH.

(June 16, 1918, 9 p. m.) In the WOEVRE the enemy, who succeeded this morning in gaining a foothold in the village of XIVRAY, was expelled shortly afterward during a lively attack by our troops, who reestablished their positions. We made a number of prisoners, including one officer. There is nothing to report from the remainder of the front.

### BRITISH.

(June 16, 1918, 9.45 a. m.) Yesterday afternoon one of our detachments penetrated a German outpost S. W. of MERRIS and took 11 prisoners.

In the course of other raids carried out during the night S. of the SOMME and in the neighborhood of HEBUTERNE we took 17 prisoners and three machine guns.

During the night hostile artillery showed considerable activity N. of BETHUNE, as well as between LOCRE and the YPRES-COMINES Canal. Early this morning it was particularly active in the neighborhood of DICKEBUSCH Lake.

### ITALIAN.

(June 16, 1918, 5.15 p. m.) A great battle has been in progress on our front since yesterday. After artillery preparation, which was exceptionally intense on account of the violence of the fire and the number of guns employed, the enemy has begun his expected offensive by launching large masses of infantry against our positions in the eastern sector of the ASIAGO Plateau, on the front of the BRENTA Valley and on the GRAPPA. He also attempted at several points to force a crossing of the PIAVE and carried out heavy local demonstrations on the remainder of the front. Our infantry and that of the Allied contingents fearlessly bore the tempest of fire of destruction and, supported by the barrage of their own artillery, which had already anticipated the enemy's preparations, with timely and deadly counter preparation fire, withstood the heavily sustained onslaught in the advance defensive areas. On the 150 km. of front the enemy attacked, in powerfully massed columns, and a large part of the positions were temporarily occupied. In some positions, however, isolated detachments with great valor continued to remain at all costs. The struggle, which did not diminish in violence in the night, is continuing in part. Our troops are firmly holding on the ASIAGO Plateau. We have completely re-occupied the original positions on the ASOLONE and the Mt. SOLAROLO salient and are very closely pressing the enemy's infantry which has passed to the right of the PIAVE.

The number of prisoners so far ascertained is 3,000, including 9 officers.

Our own and Allied airmen are taking a strong part in the battle by bombarding the crossing points on the PIAVE and attacking the enemy's massed troops with machine-gun fire. Thirty-one hostile airplanes have been brought down.

### AUSTRIAN.

(June 16, 1918, 8.57 p. m.) Early yesterday morning our armies attacked, after many hours' artillery preparation, the Italians and their Allies on the PIAVE and both sides of the BRENTA.

The Army Groups of Field Marshal von Boroevic at many places succeeded in crossing the PIAVE. The Army Corps of Lieutenant General Wurm, after overcoming bitter resistance, captured, on a wide front, the positions at SAN DONA-DI-PIAVE and on both sides of the railway ODERZO-TREVISO.

The troops of Archduke Joseph surprised and overpowered the defenses on the eastern edge of MONTELLO and penetrated these heights. Prince Schoenburg, General of Cavalry, was wounded by a grenade during the crossing of the MONTELLO by his troops.

The number of prisoners taken on the PIAVE has reached 10,000. Of the captured guns 50 have thus far been reported.

The first charge on both sides of the BRENTA also was successful in breaking down strong hostile resistance and in shattering all opposition. After overcoming heavily wooded heights our troops in great numbers penetrated into the third hostile positions, as a result of which 6,000 Italian, French and English prisoners remained in our hands. The positions which we thus captured we were able only partly to maintain. E. of the BRENTA we were compelled to evacuate MONTE RANIERO in the course of a hostile counter-attack which was supported by a flanking artillery fire. While the Italians were unsuccessfully assaulting our battalions, which clung to the hostile first lines on the N. slopes of MONTE GRAPPA, our regiments met a previously trained attack detachment whose counter-attack cleared a portion of the terrain we had won in the wooded zones of the SETTE COMUNI.

Near RIVA, in the sector of Archduke Maximilian, we captured DOSO ALTO from the Italians. In the DAMELLO area mountain troops stormed DORNO-DI-CAVENTA and 100 prisoners and three guns were brought in.

In ALBANIA on June 14 a renewed French attack in the DEVOLI Valley was repulsed.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### COMBLES-NOYON REGION.

29th Protective Flight . . . . . Prisoner's statement, R. A. F., June 9 . . . In Vimy-Combles region, Feb. 16, 1918.  
35th Protective Flight . . . . . Prisoner's statement, R. A. F., June 5 . . . New formation.

### NOYON-RHEIMS REGION.

28th Protective Flight . . . . . Prisoner's statement, R. A. F., May 26 . . . In Lys-Vimy region, April 30, 1918.  
30th Protective Flight . . . . . Prisoner's statement, R. A. F., May 26 . . . In Combles-Noyon region, May, 1918.  
31st Protective Flight . . . . . Prisoner's statement, R. A. F., May 26 . . . In Combles-Noyon region, May, 1918.  
32d Pursuit Flight . . . . . Report, R. A. F., June 2 . . . . . In Combles-Noyon region, May 27, 1918.  
228th Reconnaissance Flight . . . . . Report, R. A. F., June 6 . . . . . In Combles-Noyon region, May, 1918.  
254th Reconnaissance Flight . . . . . French source, June 1 . . . . . In Combles-Noyon region, May 3, 1918.  
272d Reconnaissance Flight . . . . . Prisoner's statement, R. A. F., June 12 . . . Near Dun, Feb. 20, 1918.  
276th Reconnaissance Flight . . . . . Prisoner's statement, R. A. F., June 12 . . . At Buhl, May 2, 1918.  
285th Reconnaissance Flight . . . . . French source, June 1 . . . . . In Combles-Noyon region, May 31, 1918.  
296th Reconnaissance Flight . . . . . Document, R. A. F., May 20 . . . . . In Combles-Noyon region, April 10.

NOTE.—This flight was erroneously reported at Bouconville, in the Champagne region, in S. A. I. No. 27, June 14, 1918, when it should have been Bouconville in the Noyon-Rheims region.

## IDENTIFICATIONS

### MEUSE-VOSGES REGION.

12th Reconnaissance Flight . . . Machine shot down, R. A. F., June 3 . . . . . At Morhange, June 1, 1918.

## THE IMPORTANCE OF IDENTIFICATION OF GERMAN PROTECTIVE FLIGHTS

Protective flights (*Schutz-Staffeln* abbreviated *Schusta*), now popularly called battle flights, seem to be used mainly for the purpose of operating against ground troops. Both pursuit (*Jagd-Staffeln* abbreviated *Jasta*) and protective flights have been concentrated for all recent offensives. The location of these flights has therefore become an important indication of hostile intentions.

On account of the greater number of pursuit flights, concentrations of these are not easily ascertained. Protective flights are more easily identified because they exist in smaller numbers, 38 having been identified to date. These are equipped with Pfalz, Halberstadt, Hannover, and L. V. C. machines and are ordinarily attached to Corps.

In the questioning of pilots and observers and during the examination of prisoners, a special effort should be made to identify any movement or concentration of these protective flights.

## LIAISON BETWEEN TROOPS AND AVIATION

TRANSLATION OF A GERMAN ORDER: FROM NTH FRENCH ARMY BULLETIN, JUNE 12, 1918.

33D RESERVE DIVISION.

1a 280 SECRET.

To be copied by officers only.

Div. Hdqrs., May 24, 1918.

SPECIAL ORDERS FOR THE CO-OPERATION  
OF TROOPS AND AVIATION.

### I. INFANTRY.

(a) An infantry aviator will reconnoiter the battle area at X hour plus 240 to observe the progress of the attack, and especially the crossing of the canal in the sector of the right regiment.

(b) The infantry attack will be followed mainly by ground observers, and in order not to cause any pause in the advance of the infantry, an infantry aviator will only call upon them to display their panels at X hours plus 290. The signal will be a rocket with one white star. This is the time when the first objective of the attack should be reached. The first line will show the panels. The progressing elements of infantry will continue the attack. As to the scheme of displaying panels, see Annex No. 1.

(c) At 8 o'clock in the evening an infantry machine will definitely ascertain the trace of the infantry first line. At other times aviators will be sent by the Division, depending on the situation.

(d) On days following Y day, an infantry machine will regularly, morning and evening, call for an indication of the first line by the infantry.

(e) The infantry aviator will first mark the trace of the first line on a weighted sketch supplied by the flight; he will then photograph the line. The message bags will be dropped near the C. P. of the division, 500 meters N. W. of Neuchatel. Important information such as concentration of enemy reserves, hostile counter-attacks, and requests for barrage and fire for effect, will be sent by wireless. The receiving stations of the Artillery Commander, and of counter battery and heavy artillery groups, will be in readiness to receive such messages. The flight will inform the Artillery Commander by wireless of the departure of every infantry aviator for the line. Tank signals will be sent by means of parachute flares.

(f) In order that fleeting targets may be immediately dealt with, the infantry aviator will notify one of the batteries in observation to engage such targets; and if desirable indicate the necessary adjustments by the methods shown in paragraph 2c. The infantry aviator need not pay attention to batteries actually in action.

(g) Infantry elements which are surrounded by the enemy may be furnished by the infantry airplane with ammunition, medical supplies, and rations in small quantities. Supply will be effected by means of baskets with parachute attachment, each containing either 30 rations, 980 cartridges, 40 grenades, or medical supplies.

The following signals are used for communication between infantry and aviators:

"We are surrounded."—A rectangle formed by laying four panel strips together, or the letters G O sent by wireless or visual signalling.

"We need food."—A "T" shaped letter with L base or the letters B M in code.

"We need ammunition."—The letter M in panels or the letters M U in code.

"We need surgical dressings."—The letter Z in panels or the letters V Z in code.

## 2. ARTILLERY.

(a) The Artillery Commander will be assigned four artillery airplanes. He will prescribe the manner of their employment. On the day of the attack one artillery airplane should always be in observation on the front. If possible, two observation planes will not be used unless hostile batteries are particularly active.

### (b) ASSIGNMENT OF BATTERIES IN OBSERVATION.

(Assignment followed here.)

Each observation battery will be furnished with a wireless receiving outfit. Arrangements in regard to this will be decided by the Chief of Liaison Service in consultation with the Artillery Commander. For each apparatus the Artillery Commander will detail a wireless officer. The duties of this officer are of the utmost importance for liaison between batteries and airplanes. Wireless officers should be chosen who are thoroughly trained in their work, and only highly efficient officers should be detailed. The Chief of Liaison Service of the division will furnish the flight with suitable wireless personnel to receive artillery messages.

For the two receiving stations at divisional C. P. (the Staff and Artillery Commander's stations) the Chief of Liaison Service will furnish one officer of the wireless service and one orderly. All wireless messages received or sent will be directed to this officer, who will be responsible for encipherment, and for the transmission to proper destination.

### (c) Employment of artillery airplanes and wireless communication.

The classes of artillery aviators are :

1. Aviators of artillery in observation who make reconnaissances of targets and signal for fire against isolated batteries and fleeting targets.
2. Aviators for artillery adjustment, where fire is delivered on battery groups by order of the artillery commander.

1. The aviator for artillery in observation is mainly charged with the reconnaissance of hostile batteries in action ; but he also observes the general effect of our own or hostile fire, and such movements in the battle area and in back areas, as columns on the march, reserves, concentrations, tanks, etc. He advances beyond our lines under protection of pursuit flights. He reports by wireless as follows :

(a) To the batteries in observation on isolated hostile batteries in action, using his judgment as to whether or not he shall adjust the fire. He determines from the artillery target maps which batteries are known and which are new. He calls first the observation batteries of Groups "Aka" and "Feka."

(b) If many batteries are in action at the same time, the artillery aviator notifies the Artillery Commander by wireless as to the section in which the hostile activity is the most marked. The Artillery Commander then gives his counter battery orders and designates on which batteries fire will be adjusted by airplane, sending out a machine for this purpose.

2. For the above purpose a machine for artillery adjustment will be in readiness on the intermediate landing field of Avaux. This field will be connected directly by telephone with the Artillery Commander ; he will instruct the adjustment airplane concerning the hostile batteries and the order in which adjustment is to be made.

## 3. THE FOLLOWING IS A LIST OF DROPPING STATIONS.

For— Divisional Information	Location—	By—	Identification Panel—
Center.....	Hill 100 .....	66th Res. Brigade. ....	Large white circle with a red cross in center.
Aka Group.....	Point 02.09, 23 b.....	Art. Commander.....	Large white letter "A".
Feka Group.....	Point 01. 11, 25 c.....	Art. Commander.....	Large white letter "F".
C. P. of Division.....	Hill 98 N. W. of Neufchatel .....	Aviation Liaison Officer.	

Someone will be continuously on duty at these stations, the personnel of which should be trained in the use of light and smoke signals.

## 4. AVIATION.

(a) When returning to the lines, all airplanes will land at Avaux. The observer will immediately telephone his report to Cavalry Captain Voss at Section Ia of the General Staff ; besides artillery aviators will telephone the Artillery Commander.

(b) The first report on the examination of photographs will be telephoned immediately to the Division, and in case of important developments an unfinished proof will be sent at once.

(c) The flight will report each evening the number of machines available for the next day to Captain of Cavalry Voss.

(Signed) VON BARFUSS.

24/5/1918.

### Annex 1.

Note Ia 280 of the  
33d Reserve Division.

### DISPLAY OF PANELS.

(1) Liaison panels for infantry airplanes will not be shown for the purpose of marking the line, except upon signal by the aviator. This is a rocket with one white star.

Panels will remain displayed until the infantry aviator has left the sector. He can be recognized by long red, white, and black streamers attached to his lower plane.



C. P.'s of battalions and regiments may signal to the infantry machines by use of panels without waiting for a flare from the plane.

(2) Four or five panels formed end to end in a straight line will always be displayed. Single panels are not distinguishable. Do not stretch panels in the trenches or in shell holes, but on the parapet or parados. On a light-colored background display the red side, and on a dark-colored background display the white side. Substitute newspapers for panels if necessary.

Only the first line of the infantry should display panels. This is extremely important in order to avoid confusion. In advancing do not leave old panels behind. To help in marking the trace of the line, the infantry is authorized to use white flares with one or more lights, Bengal fire, or red fire. In woods, Bengal fire will always be used. Generally panels should be used in addition to flares.

(Signed) P. O. Chief of Staff,  
HERGAULT.

## SUMMARY OF OFFICIAL COMMUNIQUE

JUNE 18, 1918

### AMERICAN.

(June 18, 1918, 9 p. m.) There was continued artillery fighting in the CHATEAU-THIERRY region and on the MARNE front. Last night our patrols crossed the MARNE and captured several prisoners.

### FRENCH.

(June 18, 1918, 11 a. m.) We carried out a successful local operation S. of the AISNE. S. of AMBLENY and E. of MONTGObERT we took about 100 prisoners.

The night was quiet on the rest of the front.

(June 18, 1918, 9 p. m.) Artillery was rather active N. W. of MONTDIDIER and on various points between MONTDIDIER and the AISNE. We carried out a local attack this morning S. of VALSERY which enabled us to improve our positions and to capture 100 prisoners and some machine guns. A German trench raid was repulsed in the vicinity of AVOCOURT. The enemy left his dead on the terrain and we made some prisoners.

AVIATION. In the last five days 32 hostile machines were brought down or forced to descend out of control. In addition to these, four German airplanes were shot down by our anti-aircraft guns and three captive balloons were set on fire. In the same period of time 22 tons of projectiles were dropped on the railway stations of SOISSONS, ROYE, NESLES and CHAULNES.

### BRITISH.

(June 17, 1918, 8.40 p. m.) E. of HERUTERNE the enemy last night penetrated an outpost and one of our men is missing. Early this morning another German detachment attacked our lines N. of the SOMME and was repulsed.

Apart from the usual activity of the artillery of both sides there is nothing to report.

AVIATION. Yesterday the variable weather hindered aerial operations. Nevertheless our airplanes and balloons did much work in co-operation with the artillery. Many photographs were taken and useful reconnaissances carried out on the northern part of the British front and in the French battle area.

The hostile air service was intermittently active. Eleven German machines were destroyed in the course of air combats and others forced to land disabled. A hostile balloon was forced down in flames. Furthermore, our anti-aircraft fire brought down one German plane and forced another to land disabled. During the day we lost ten machines, of which six fell S. of MONTDIDIER.

We dropped 22 tons of projectiles during the day and 12 tons during the following night. We violently bombarded the railway stations of ARMENTIERES, FSTAIRES, COMINES, COURTRAI, and the docks at BRUGES. Two of our machines are missing.

(June 18, 1918, 7.55 a. m.) Last night the enemy attempted a raid S. E. of VILLERS-BRETONNEUX, which was repulsed. We took some prisoners.

In the course of successful raids carried out S. W. of ALBERT and in the neighborhood of MOYENNEVILLE, and of patrol combats E. of the Forest of NIEPPE, our troops took prisoners and one machine gun.

German artillery was more active than usual last night in the Valley of the ANCRE, S. of ALBERT, and also W. of SERRE.

### ITALIAN.

(June 18, 1918, 5.15 p. m.) The violence of the battle which lessened slightly on the mountain front gradually increased along the PIAVE. Yesterday the army withstood with its usual valor the enemy's powerful effort. Along the front from MASERADA to CANDELU the enemy renewed his attempts to establish other bridgeheads on the right bank of the river, but his efforts broke down with heavy losses.

Between FOSSALTO and CAPO SILE the fighting developed without quarter. Formidable attacks by the enemy were followed by our counter-attacks. Attempts in which the enemy advanced vigorously were broken up by our resistance or stopped by counter-offensive action. The fighting did not diminish until late at night. The brave troops of our armies were severely tried, but the enemy was unable to increase the slight depth of the terrain in which, during the last four days, the fighting has raged. More than 1,500 prisoners remained in our hands. Our aviators continued to work tirelessly and co-operated effectively in the battle under a heavy rain. On the northern edge of the MONTELLO we have reinforced our line along the river as far as CASA SERENA. During the afternoon the enemy launched two attacks N. E. of the hill to the S. W. and S. E. The first was stopped short on the line from 279 to N. E. of GIAVERA; the second was checked immediately S. of railway line from St. MAURO to SAN ANDREA.

In the region of MONTE GRAPPA we repulsed two local hostile attacks and carried out raids, capturing about 100 prisoners. In VAL BRENTA and E. of VAL FRENZELA hostile reconnoitering parties were promptly repulsed. On the eastern edge of the ASIAGO Plateau our troops captured the PIZZO RAZEAU and the hills S. E. of SASSO, taking about 3,000 prisoners.

### GERMAN.

(June 18, 1918, 1.10 p. m.) WEST FRONT. Army group of Crown Prince Rupprecht. In isolated sectors in Flanders, on both sides of the Lys, and between ARRAS and ALBERT, the hostile artillery developed lively activity.

After heavy artillery preparation the enemy attacked S. W. of ALBERT at about midnight. He was repulsed and left prisoners in our hands.

Army group of German Crown Prince. S. W. of NOYON and S. of the AISNE artillery activity increased during the evening. Local attacks by the enemy N. of the Aisne and N. W. of CHATEAU THIERRY were repulsed.

(June 18, 1918, 8.32 p. m.) There is nothing new to report.

### AUSTRIAN.

(June 18, 1918, 1.20 p. m.) The battle in Venetia continues. The army of General Freiherr von Wurm made progress at many points. Its southern wing in the course of hard fighting reached the FOSSETTA Canal. General Archduke Joseph developed his success in the MONTELLO region. Italian counter-attacks were unsuccessful. In three days of fighting 73 Italian guns were captured in this region. Many guns of heavy caliber were included among the guns taken.

Along the Brenta the enemy repeatedly attacked our new positions without success. British attacks S. of ASIAGO were equally unsuccessful.

The number of prisoners has risen to 30,000. The number of guns captured is more than 120. The booty in trench mortars and machine guns and other war materiel has not yet been counted.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### FLANDERS REGION.

8th Bombing Squadron .....	French source, June 1 .....	New formations of 25th, 26th and 27th flights.
56th Pursuit Flight .....	French source, May 20 .....	In Vimy-Combles region, Apr. 5, 1918.

### RIVER LYS-VIMY REGION.

34th Reconnaissance Flight ...	French source, May 20 .....	In Vimy-Combles region, May, 1918.
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### VIMY-COMBLES REGION.

17th Reconnaissance Flight ...	French source, May 30 .....	Left Italy for Western front, Apr. 1, 1918.
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### COMBLES-NOYON REGION.

40th Reconnaissance Flight ...	French source, June 14 .....	In Vimy-Combles region, June 1.
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### NOYON-RHEIMS REGION.

12th Pursuit Flight .....	R. A. F. report, June 12 .....	In Vimy-Combles region, Apr. 24, 1918.
21st Pursuit Flight .....	French source, May 31 .....	At Stenay, March, 1918.
45th Pursuit Flight .....	Prisoner's statement, R. A. F., June 9...	In Vimy-Combles region, Apr. 26, 1918.
61st Pursuit Flight .....	French source, May 30 .....	In Combles-Noyon region, May, 1918.
66th Pursuit Flight .....	Prisoner's statement, R. A. F., June 9...	In Metz area, Mar. 27, 1918.
80th Pursuit Flight .....	French source, May 30 .....	In Lys-Vimy region, Apr. 26, 1918.
81st Pursuit Flight .....	Document, R. A. F., June 1 .....	Not previously identified.
61st Reconnaissance Flight...	Document, R. A. F., Feb., 1918 .....	Not identified since Dec., 1916.

### VOSGES-SWITZERLAND REGION.

10th Reconnaissance Flight ...	French source, June 8 .....	Near Rethel, March, 1918.
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## DISTRIBUTION OF GERMAN AIR FORCES, JUNE 19, 1918

### FLIGHTS BY CLASS.

Region.	Pursuit (18 machines)	Bombing (12 machines)	Protective (6 machines)	Reconnaissance (6-9 machines)	Total.
Flanders .....	12	11	1	11	35
River Lys-Vimy .....	9	6	5	19	39
Vimy-Combles .....	5	..	6	23	34
Combles-Noyon .....	19	9	15	34	77
Noyon-Rheims .....	20	3	10	30	63
Rheims-Argonne .....	3	..	1	9	13
Argonne-Moselle .....	..	..	..	10	10
Moselle-Vosges .....	4	..	..	10	14
Vosges-Switzerland .....	3	..	..	9	12
Interior .....	..	..	..	3	3
Exterior Fronts.....	3	..	..	25	28
Unlocated .....	4	..	1	20	25
Total Flights .....	82	29	39	203	353

## GROUPING OF PURSUIT FLIGHTS

FROM SUMMARY OF AIR INTELLIGENCE, R. A. F., JUNE 19, 1918.

A prisoner captured by the French states that eight pursuit flights are grouped under one command, known as the 5th Pursuit Group (*Jagdgruppe*) in the Seventh German Army; the 1st Pursuit Squadron was also under the orders of the group commander for operations.

It appears possible that such a group is a formation comprising all the pursuit flights in one army, which are grouped under one commander, who is responsible to the Army Commander of Aviation (*KoFl.*) for co-ordinating the work of scout flight squadrons during the battle. From the fact that the units identified as comprising the 5th Group were drawn from various sectors of the Western front, it is possible that a "group" is a temporary organization only.

## GERMAN PRECAUTIONS AGAINST AIR OBSERVATIONS

FROM SUMMARY OF AIR INTELLIGENCE, R. A. F., JUNE 19, 1918.

Two British N. C. O.'s, who escaped recently from the German lines, state that the Germans take care to camouflage everything; mechanical transport is permanently camouflaged with material resembling our own netting. Other transport, when parked, even for a short period, is drawn close up to a hedge and covered with branches. Transport is never parked in an open field.

Great care is also taken to camouflage supply dumps.

## DUTIES OF GERMAN AIR OBSERVERS

FROM SUMMARY OF AIR INTELLIGENCE, R. A. F., JUNE 16, 1918.

A document captured by the French contains particulars as to the information required from air observers by the General Staff.

A translation of this document is given below. —

## NOTES FOR OBSERVERS.

II-5-18.

Immediately after landing, observers will personally telephone results of reconnaissances to Lieut. Stoever, commanding the 18th Group, to the division and to the divisional artillery commander.

The following items will be reported—

Flight No. ....	Nature of reconnaissance.....	Time of flight.....from.....to.....
Pilot .....	Map .....	Weather .....
Machine .....	Date.....	Route .....
		Height.....

1. *Visual observations.*—Roads, railways, concentrations of hostile troops, trenches (whether occupied or not), changes in trench systems, etc.

2. *Artillery reconnaissance.*—Batteries, trench mortars, A. A. batteries in action, activity of our own and the enemy's artillery, the lie of our artillery fire (1/25,000 map).

3. *Artillery registration.*—Targets engaged, whether fire for effect followed on registration; if no results were obtained, state the reason.

4. *Contact patrols.*—Mark out the front line; state whether enemy trenches are occupied or not; assemblies of troops; reserves.

5. *Photographic reconnaissances.*—Number of plates exposed; areas photographed.

6. *Activity of the enemy's aeroplanes and A. A. guns.*

7. *Combats.*

8. *Other points of interest.*

## GERMAN ARMORED "ALBATROS" MACHINE

FROM SUMMARY OF AIR INTELLIGENCE, R. A. F., JUNE 18, 1918.

An armored *Albatros* two-seater was brought down recently by the French; the machine was completely burnt. It was fitted with a 220 h. p. Benz engine with aluminum pistons and an adjustment on the carburetors for high altitudes.

The armor plating is 5 mm. thick and runs on the side and bottom from the front of the pilot's cockpit to the rear of the observer's cockpit. The rear of the latter cockpit was also protected, as well as the top of the fuselage between the two cockpits, where probably the petrol tank was carried. The following are the dimensions:

Sides (each) .....	7' 9"	x	3' 7 3/4"
Bottom .....	7' 9"	x	2' 9 1/2"
Piece in rear of observer's cockpit .....	3' 6 1/4"	x	2' 7"

A 2.2-cm. automatic gun was fitted on the outside of the observer's cockpit, a bracket being fixed to the side of the fuselage, into which a fork-shaped piece fitted which carried the gun; the whole mounting appeared very crude.

The field of fire was about 180°. There did not appear to be anything to prevent it from firing through the propeller, and there was no form of synchronisation. It is charger fed; the chargers are slipped into the top of the breech, and each contains 12 rounds. The shells are 6" long and are most probably explosive. After the first round, the gun is automatically operated by the recoil as long as the trigger is kept pressed. The recoil is taken by a round section coil-spring, which is in a casing round the barrel. The tension of this spring can be altered according to requirements.

The rifling consists of 9 grooves.

Recoil .....	10 1/4"
Overall length of gun .....	3' 5 3/4"
Outside diameter of barrel casing .....	2 1/2"

Weight.—Gun, mounting and 1 charger, 90 lbs.

The foresight is a 4" ring with crossed wires and a 1 1/2" center ring. The backsight, which is set 3" out horizontally on the left of the gun, is a plain V

## GERMAN AVIATION ACTIVITY BEFORE AND DURING THE BATTLE OF THE 9th TO 13th OF JUNE

FROM FRENCH 3D ARMY BULLETIN, JUNE 16, 1918.

The German air forces between the Somme and the Oise and E. of the Roye-Peronne road were above normal for a defensive sector from June 1 on, while airdromes in the Avre and Somme sector diminished in capacity or were vacated.

Some hostile flights employed on the army front were sent to the Aisne-Marne front the latter part of May, were replaced by others. The total number of machines opposite us may be estimated as about 300.

After June 1, activity of hostile aviation was characterized especially by protective flights and reconnaissances of our first lines. Only three deep reconnaissances were made by single machines and these not farther than Clermont and Creil. Some of our balloons were attacked, but at infrequent intervals. After the second, the number of flights for artillery adjustment became insignificant, and during the days immediately before the attack these were practically nil. Night flying became extremely active and in addition to long distance operations the enemy continually bombarded cantonments in the forward zone and Compiègne and Creil.

During the battle itself there were no deep reconnaissances, but the activity over our lines was greater than during the March offensive, concentrating the entire effort over the battle zone day and night. The protective flights were used as battle flights for the purpose of dealing with ground objectives rather than to engage in aerial combat. To this end they would make swift flights over our lines whenever the absence of our planes afforded them opportunity, delivering machine-gun fire upon first line and

reserve troops, convoys and commanding posts. They also attacked our artillery and infantry planes in the attempt to keep them from penetrating their lines. Reconnaissance machines did not regularly make flights for artillery adjustment, but from time to time they indicated favorable targets by coordinates and were effective in infantry contact work. During the battle night flying conditions were not favorable for extensive bombing operations, and for this reason hostile planes did not make any important raids, but continued their attacks on the Remy-Estrees-Saint-Denis-Pont-Sainte-Maxence regions. The enemy did not advance his airdromes.

## SUMMARY OF OFFICIAL COMMUNIQUE

JUNE 22, 1918.

### AMERICAN.

(June 22, 1918, 9 p. m.) The day passed quietly at all points held by our troops.

### FRENCH.

(June 22, 1918, morning.) We repulsed hostile raids in the region of BELLOY and in Upper ALSACE. On the other hand, we rushed a hostile post S. E. of SAINT-MAUR and took prisoners.

There is nothing to report on the rest of the front.

(June 22, 1918, 11 p. m.) Intermittent artillery struggle at several points on the front.

The day was calm everywhere else.

### BRITISH.

(June 22, 1918, 9.50 a. m.) In the course of raids and patrol encounters last night we took some prisoners and inflicted heavy losses on the enemy in the sectors of VILLERS-BRETONNEUX and STRAZEELE.

There is nothing else of importance to report.

(June 22, 1918, afternoon.) Last night during raids we took prisoners and inflicted losses on the enemy. There were artillery encounters in the VILLERS-BRETONNEUX sector and at STRAZEELE.

(June 22, 1918, 8 p. m.) There is nothing particularly interesting to report from the British front.

(June 22, 1918, 11 p. m.) AVIATION. There is nothing particularly interesting to report on the British front. Despite unfavorable weather on June 21 our airplanes were able to work in liaison with our artillery and to execute photographic reconnaissances and patrol duty. One enemy machine was brought down, two of ours are missing.

### BELGIAN.

(June 22, 1918.) In the course of the past week artillery activity has been quite moderate, nevertheless in the zones of NIEUPORT and BOESINGHE there has been some action. Fighting with bombs has been frequent on the outskirts of DIXMUDE. Our batteries have bombarded the hostile cantonments of St. PIERRE-CAPPELLE and LEKE in reply to similar firing towards our zone of the rear. We have carried out much harassing, neutralization and destructive fire and have interfered with the enemy communications and organizations.

The activity of infantry patrols has been particularly great. Some of our detachments have penetrated several times into the enemy organizations in the region of KIPPE-LANGEMARCK and brought back into our lines more than 20 prisoners and some trench materiel.

AVIATION. In spite of unfavorable weather conditions, aviation activity has gone on with success.

### ITALIAN.

(June 22, 1918, 4.50 p. m.) The powerful pressure of the enemy's offensive, broken or checked on the entire battle front by the resistance and counter-offensive of our troops, has not been renewed since the evening of June 20. Yesterday the adversary again launched a strong local attack in the direction of LOSSON, S. W. of FOSSALTA, but he was repulsed with heavy losses. Hostile concentrations of fire of extreme violence were directed against the MONTELLO and the region N. W. of MONTE GRAPPA. They were vigorously countered and attempts made by infantry detachments to advance were crushed.

At CAVAZUCCHERINA our Marines and Bersaglieri, supported by the batteries of our navy in a new and brilliant action widened the bridge-head and captured 150 prisoners and a large amount of arms and materiel.

On the remainder of the front small adjusting actions enabled us to improve our lines and to take prisoners and booty.

On the ASIAGO Plateau one of our small detachments penetrated a hostile advanced position in full daylight and captured the garrison after a lively struggle.

AVIATION. Ten hostile airplanes and three captive balloons were brought down.

### GERMAN.

(June 22, 1918, 1.13 p. m.) WEST FRONT: Army Group of Crown Prince Rupprecht. Between ARRAS and ALBERT violent local attacks by the enemy yesterday lasted until morning. They ended in complete failure for the adversary. Strong British detachments were repulsed, partly in severe hand-to-hand fighting, on both sides of the SCARPE, near BOIRY-BECQUERELLE, HEBUTERNE, HAMEL and in AVELUY Woods. On the rest of the front also the British made several unsuccessful reconnaissance attacks. We took prisoners in the course of the repulse of hostile raids and in attacks by our own troops S. of the SOMME.

A hostile air attack on BRUGES caused losses to the inhabitants.

Army Group of German Crown Prince. S. W. of NOYON the enemy repeated his attacks with strong detachments, but without success. S. of VANDELICOURT, between the OISE and the MARNE, the enemy showed lively activity. Repeated raids attempted by the French were without result. Local attacks by the French and Americans N. W. of CHATEAU-THIERRY were repulsed with heavy losses.

(June 22, 1918, 8.31 p. m.) There is nothing new to report.

### AUSTRIAN.

(June 22, 1918, 8.40 p. m.) The fighting along the PIAVE yesterday decreased in violence. In some sectors of the MONTELLO and W. of SAN DONA, where the Italians renewed their attacks, they were again repulsed with heavy losses.

Between June 15 and 20 the enemy has lost 42 airplanes and four captive balloons, shot down by our aviators and anti-aircraft gun fire.

The number of prisoners has risen to 40,000. This number includes some Tzecho-Slovak legionnaires, who were immediately subjected to the treatment prescribed by the rules of warfare.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### FLANDERS REGION.

240th Reconnaissance Flight... Doc., R. A. F., Apr. 27..... In Vimy-Combles region, Mar. 26, 1918.

### RIVER LYS-VIMY REGION.

7th Pursuit Flight ..... Mach. shot down, R. A. F., June 19..... In Flanders region, Mar. 6, 1918.

### VIMY-COMBLES REGION.

11th Reconnaissance Flight .. Doc., R. A. F., Apr. 20..... In Noyon-Rheims region, Jan. 27, 1918.

### COMBLES-NOYON REGION.

13th Pursuit Flight ..... Pris. stat., R. A. F., June 12 ..... In Noyon-Rheims region, Jan. 28, 1918.  
15th Pursuit Flight ..... French source, June 21 ..... In Noyon-Rheims region, March, 1918.  
262d Reconnaissance Flight... Pris. stat., R. A. F., June 3 ..... In Noyon-Rheims region, Mar. 21, 1918.

### NOYON-RHEIMS REGION.

8th Pursuit Flight ..... Report, R. A. F., June 23 ..... In Combles-Noyon region early part of June, 1918.  
26th Pursuit Flight ..... Mach. down, R. A. F., June 12..... In Flanders region, Dec. 3, 1917.  
41st Pursuit Flight ..... Pris. stat., R. A. F., June 9 ..... In Vosges-Switzerland region, Mar. 17, 1918.

### VOSGES-SWITZERLAND REGION.

43d Reconnaissance Flight... Pris. stat., R. A. F., June 8 ..... In Argonne-Moselle region, Mar. 1, 1918.

## IDENTIFICATIONS

### MOSELLE-VOSGES REGION.

3d Single-seater Battle Flight. French source..... At Morhange, May 14, 1918.

### VOSGES-SWITZERLAND REGION.

5th Single-Seater Battle Flight. French source..... At Freiburg, May 4, 1918.

## GERMAN BOMBING UNIT IN LORRAINE

German bombing machines operated during the night of June 26-27 and 27-28 in the Toul-Luneville region. The operations were confined to airdromes. It has been several months since such a unit indicated its presence in this sector. It is believed to be stationed at the airdrome on the hill southeast of Boulay.

## DUTIES OF GERMAN AVIATION

FROM R. A. F SUMMARY OF AIR INTELLIGENCE, JUNE 20, 1918.

A document, issued down to companies and batteries by the Commander of Aviation of the First Army in August, 1917, contains information regarding the duties of the different types of units.

Translations of extracts from this document are given below.

### THE DIFFERENT DUTIES OF AIRMEN.

The infantry airmen will:—

1. Locate our front line and patrol it.
2. Receive signals from the forward infantry line and transmit them to the rear.
3. Locate the enemy front line.
4. Reconnoiter visually and photographically the enemy trench system with all its defensive organizations.
5. When an attack is expected, locate the trenches where troops are assembling.
6. In battle, determine the movement of the enemy's advance to the attack and transmit the information by light signals and wireless telegraphy.
7. Look out for enemy reserves and tanks.
8. Follow up our own attack and report progress to the artillery and to commanders.
9. Register trench mortars on to particularly important and difficult targets.

Reconnaissance machines flying far behind the enemy's lines will:—

1. Observe road and railway traffic.
2. Reconnoiter for new roads, railways, stations, bridges, ammunition dumps, camps, airdromes, and find out what camps or airdromes have been abandoned, in order to enable the higher command to draw conclusions as to the enemy's intentions and movements of his reserves.
3. During battle, locate the position of the enemy's reserves and thereby determine the principal front of attack.

For scouts, it is laid down that they shall co-operate in the fighting on the ground whenever possible ; in practice, however, low-flying scouts have seldom been encountered during the present year's fighting.

Bombing squadrons are to carry out operations over the forward and back areas by day as well as by night ; actually, during the present year, little or no daylight bombing has been carried out by bombing squadrons.

# TREATMENT OF AIR FORCE PRISONER

FROM R. A. F. COMMUNIQUE, JUNE 12, 1918.

The following information was obtained from a German prisoner :—

"On May 28 a British single-seater was forced to land near Morcourt. The Germans who took him prisoner questioned him, but he refused to answer. Thereupon they threatened to shoot him ; but as he still refused to reply to their questions he was taken to the rear. Subsequently the Battalion Commander told the men to imitate his example, if captured."

# CONCEALMENT FROM AERIAL OBSERVATION

TRANSLATION OF A GERMAN DOCUMENT : FROM FRENCH VIIITH ARMY BULLETIN, JUNE 24, 1918.

HEADQUARTERS XVIIIITH ARMY.

Ia Ib No. 700

MAY, 1918.

In order to render reconnaissance by hostile airplanes more difficult and to save us useless losses from the machine gun and bombing attacks of hostile air forces, the following principles for protection against airplanes will be constantly observed.

1. *Large troop movements and marches incidental to a change of billets will, as a rule, only take place at night.* When troops on the march are taken by surprise at night by a parachute flare dropped by a hostile airplane they will stop immediately and not move.

2. As most of the villages in the zone of the army are destroyed, it will be necessary to consider camouflage against airplanes when selecting billets for the first line.

3. *During the day, traffic will be kept to a minimum upon the roads* when atmospheric conditions are favorable for flying. When a hostile airplane is reported, cover will immediately be taken under trees of bushes, among houses, barracks or in dugouts, or the troops will be deployed along the walls and hedges and will not move. *Exposure to the view of an approaching hostile airplane under the pretext of observing it, is absolutely forbidden.*

4. *Vehicles and artillery will never be parked in the open.* They will be parked under trees or along hedges if possible, always singly or in small compact groups, in farmyards or as near as possible to walls or houses.

*It will be made the practice to march through shadows when the sun is shining.*

5. *All vehicles* especially those with a bright surface or loaded with baled hay, or guns, loaded rail road cars (narrow and standard gauge), as well as all things which might attract the attention of hostile airplanes, such as dumps of lumber, ammunition and materiel *must be freshly concealed every day with foliage or other materials according to the nature of the surrounding ground* (such as, for example, the ruins of walls in demolished places).

6. Camouflage will be put up *before beginning new construction.*

7. *At night all lights will be carefully screened.* Where there are no shutters, windows will be screened with dark cloth, pieces of clothing, shelter-halves, or similar things.

Every commanding officer will cause these orders to be fully carried out. Officers in charge of billets will do the same for their zone of billets.

It will be ascertained *each day* whether all measures have been taken for concealment against planes, as provided in these orders.

Throughout the zone of the army, the execution of these orders will be supervised by our own airplanes and balloons.

Violations will be punished.

The Chief of Staff of the Army,  
(Signed) VON SAUREZWEIG,  
Brigadier General.

Numerous copies of these instructions will be distributed among all companies and batteries ; they will be posted in the billets, canteens, etc., and will be the subject of lectures to the troops. They will also be posted in the railway stations, villages, etc.

# SUMMARY OF OFFICIAL COMMUNIQUE

JUNE 28, 1918.

## AMERICAN.

(June 28, 1918, 9 p. m.) In the CHATEAU-THIERRY region we again improved our positions S. of TORCY. The number of prisoners taken by us at this point in the operation of June 25 has increased to 309, of whom seven are officers. There have been no new developments at other points held by our troops.

It is established that our aviators have shot down three hostile machines in the Toul region since the beginning of the week.

## FRENCH.

(June 28, 1918, 11 a. m.) N. W. of MONTDIDIER we advanced our lines slightly at SENECA Woods and took about 30 prisoners.

Between the MARNE and the OURCO, S. of DAMMARD, we took 22 prisoners in the course of a raid.

The night was quiet on the rest of the front.

(June 28, 1918, 8.55 p. m.) S. of the AISNE we attacked this morning from S. of AMBLENY to E. of MONT-GOBERT for the purpose of capturing assembly points which the enemy had prepared in this region. Our troops penetrated the German positions on a front of seven kilometers, captured FOSSES-en-HAUT, LAVERSINE and the hills N. W. of CUTRY and advanced our lines to the western outskirts of SAINT-PIERRE-AIGLE, as well as to the ridge S. of this village. Our advance at some points amounted to two kilometers. The number of prisoners counted up to the present exceeds 1,060.

There is no event of importance to report from the rest of the front.

AVIATION. On June 26 and 27, 19 German machines were brought down or disabled and captive balloons were set on fire by our pursuit planes. Furthermore, a 20th machine was destroyed by anti-aircraft artillery. Our bombing service during the same period dropped, by day as well as by night, 58 tons of projectiles on the aviation grounds of the SOMME and the AISNE region, on the cantonments and bivouacs of ROSIERE-en-SANTERRE, FISMES, GUIGNICOURT, the railway stations of SOISSONS, FERE-en-TARDENOIS, and other points.

Two ammunition dumps were blown up and several fires were observed.

Lieutenant Sardier shot down two German balloons on June 4, this making the 10th and 11th machines brought down by this pilot to that date.

#### BRITISH.

(June 27, 1918, evening.) In the course of patrol operations last night in the vicinity of BOYELLES, we inflicted losses upon the enemy. There is nothing else of importance to report apart from the activity of the artillery of both sides in various sectors.

(June 28, 1918, morning.) During the night of June 26-27 a German raid against one of our posts in the neighborhood of MOYENNEVILLE, S. of ARRAS, was repulsed with losses to the enemy.

Yesterday a detachment of our troops successfully carried out a raid in broad daylight near MERICOURT and took prisoners without losing a man.

During the night our artillery and that of the enemy displayed activity in the neighborhood of LE ROSSIGNOL Woods, S. E. of GOMMECOURT, where our patrols inflicted losses on the enemy.

(June 28, 1918, evening.) This morning British troops carried out a successful minor operation on a front of about three and a half miles E. of NIEPPE Forest. Our line on this front has been advanced to an average depth of nearly a mile and over 300 prisoners and 22 machine guns have been captured. All our objectives were gained, including the hamlets of L'EPINETTE, VERTE RUE and LA BECQUE. The enemy was taken by surprise and our casualties are light. At the same time, Australian troops attacked and captured certain hostile posts W. of MERRIS together with 43 prisoners and six machine guns. On the remainder of the British front the situation is unchanged.

#### ITALIAN.

(June 28, 1918, 4.40 p. m.) Moderate action of the artillery of both sides occurred along the whole front.

The activity of the enemy gave rise to lively fighting around Mt. CORNO and to the S. of SASSO ROSSO.

On the ASIAGO Plateau, a British party penetrated into the enemy's trenches, inflicting losses and bringing back a few prisoners.

Aviators carried out lively bombardments.

#### GERMAN.

(June 28, 1918, 12.45 p. m.) WEST FRONT: The British and French showed lively activity on both sides of the SOMME; in other sectors between the YSER and the MARNE artillery fire also increased during the evening. Early this morning the enemy's fire became very active on both sides of the LYS, between BAILLEUL and BETHUNE, and S. of the AISNE. Our artillery replied vigorously. In some sectors infantry fighting developed.

AVIATION: Great air activity led to violent air fights. Our airplanes yesterday shot down 25 hostile airplanes and one captive balloon. Our anti-aircraft artillery shot down five hostile machines. Captain Berthold achieved his 37th, Lt. Loewenhardt his 29th, and Lt. Rumey his 26th and 27th air victories.

(June 28, 1918, 8.32 p. m.) N. of the LYS and S. of the AISNE we are repelling violent hostile local attacks.

#### AUSTRIAN.

(June 28, 1918, 8.43 p. m.) In the GIUDICARIA, in the ARCO Basin and in the ADIGE Valley the Italians directed harassing fire without effect on our areas far behind our lines.

Several hostile attempts to reconnoiter in the PRESENA region were broken up by the vigilance of our garrisons.

On the Venetian mountain front, COL DEL ROSSO, which had been heroically held on the 26th, MONTE DI VAL BELLA to the W. thereof and the region W. of ASIAGO were under persistent artillery and trench mortar fire. A hostile attack under cover of this fire S. of CANOVE was repulsed with heavy losses by detachments of the 74th Regiment.

On the PIAVE front a new attempt by the Italians to cross the river at FOSSALTA was frustrated. The PIAVE continues in flood.

# AIR INTELLIGENCE BULLETIN

## CHANGES IN LOCATION OF UNITS

### VIMY-COMBLES-REGION.

8th Pursuit Flight ..... French source, June 5..... In Noyon-Rheims region first part of June.

### NOYON-RHEIMS REGION.

202d Reconnaissance Flight... Doc., R. A. R., June 18..... In Combles-Noyon region, Apr. 6, 1918.  
227th Reconnaissance Flight . Doc., R. A. F., June 18..... In Vimy-Combles region, May 27, 1918.

### VOSGES-SWITZERLAND REGION.

4th Mosaic Section..... Pris. Stat., R. A. F., April, 1918..... Not previously identified. At Schles-tadt.  
36th Reconnaissance Flight .. French source, June 27..... In Rheims-Argonne region, Mar., 1918.

## THE GERMAN AIR SERVICE

### PRINCIPLES OF ORGANIZATION.

The general principles governing the organization and employment of the German Air Service are similar to those of other arms. These include :—

1. The framework, or sector organization, sufficient for quiet periods, but capable of expansion during active operations.

2. An independent basic organization of small size which permits the formation of larger units according to the requirements of the situation, but allows utilisation of small units on work where larger units would be wasted.

3. A large mobile reserve under the control of G. H. Q. This is shifted to armies and army groups as their operations may require.

4. A classification of units according to efficiency and equipment, the best to be used on the most important front, and given priority in personnel, equipment and privileges.

5. An element of surprise, by withholding revelation of concentration until immediately before an attack.

### SECTOR UNITS.

For each army one or two flights for long distance reconnaissance, a mosaic section fitted with motion picture cameras, and two or three pursuit flights.

To each corps two or three reconnaissance flights for trench reconnaissance, photography of special objectives, and adjustment of heavy artillery.

### STRENGTH OF FLIGHTS.

From statements of prisoners and information from other sources it would appear that the theoretical strength of flights in machines is : Pursuit, 18 ; protective, 12 ; bombing, 12 ; and reconnaissance with divisions, 9, others, 6. The British report finding an actual average strength of : Pursuit, 18 ; protective, 6 ; bombing, 8 ; and reconnaissance, 9.

### MOBILE UNITS.

**PURSUIT.**—Flights not required as sector troops are being assembled into squadrons consisting of from three to five flights. Where more than one flight appears on an offensive front, temporary groups are formed.

**PROTECTIVE.**—These flights are mainly used for low flying action against ground troops, though apparently they still sometimes furnish protection for reconnaissance machines on special missions. Protective aviation is concentrated entirely on active fronts. One squadron of four flights is known to have been originated.

**BOMBING.**—Usually organised into squadrons of three flights operating directly under the orders of German G. H. Q. They are mainly located on active fronts.

**RECONNAISSANCE.**—German Manual of Position Warfare, Parts V and VI, state flights are allotted to divisions on main battle fronts for artillery and infantry work, and even on quiet fronts a few machines should be placed at disposition of divisional artillery commander. Several captured orders indicate that this principle has been followed, and that every effort has been made to emphasise the necessity for liaison between infantry and airplanes.

The movements of the 202d, 237th, 238th, 274th, 258th, and 277th flights were studied with reference to the 103d, 10th, 228th, 25th, 52d Reserve, and 6th Bavarian Reserve Divisions respectively. Information has been received that at some period since April 1, the flight in question had worked with such division. In all cases indentifications show that the flight has moved once with the division, and in one case twice. All six divisions on offensive fronts. In another case a fifth class division has had the same flight working with it for several months on a very quiet sector. It seems justifiable to assume that most divisions will have flights permanently assigned, as the advantages of such an arrangement are plain.

### INTELLIGENCE INDICATIONS FROM AIR UNITS.

**PURSUIT.**—The 1st Squadron, formerly commanded by Richthofen, consisting of the 4th, 6th, 10th, 11th, and 18th flights, was assembled and trained during the early months of the year in the vicinity of



Valenciennes. It worked in the Picardy offensive, and was then transferred to the Laon region for the Aisne offensive, forming with the 5th Squadron and extra flights what was known as the 5th Group. Machines of the 4th flight have sky blue tail planes. Machines of another flight—number not known—have tail planes in black and white stripes. Some machines of the squadron are entirely red.

The 2d Squadron consisting of the 12th, 13th, 15th, and 19th flights, was apparently assembled in the area of the XVIIIth Army, where it worked during both phases of the 1918 offensive.

The 34th, 77th, and 78th flights compose the 3d Squadron which operated in the Montdidier-Noyon offensive. The 77th flight has white rudders and blue fins.

The 5th Squadron consisting of the 9th, 41st, 45th, 50th, and 66th flights, were assembled in the Laon region and worked during the Aisne offensive.

The 8th Squadron consisting of the 23d, 35th, and 59th flights, was apparently assembled opposite Vimy where it has remained to date. These are all marked with a large white "V" on the top plane, the apex being over the leading edge of the center section; on the bottom surface of the lower plane, a black line on either side of the fuselage running from the inner corner of the leading edge diagonally across the plane, thus representing the arms of a "V".

Other markings of pursuit flights are:—

28th—Machine painted black.

46th—Tail planes in green and yellow stripes.

76th—Tail planes in blue and white stripes.

All possible information should be obtained concerning squadron organization and distinctive markings. Use of such information may be the means of locating entire squadrons from having seen a single machine. The presence of certain pursuit squadrons has become an important indication of the enemy's intentions.

PROTECTIVE.—The 28th, 30th, 31st, and 32d, all Bavarian flights, have been organized into a squadron. This worked in the Picardy offensive, and was then moved to the Laon region for the Aisne offensive. No distinctive markings of protective flights have been reported.

As Protective flights are only assigned to active fronts, their organization into squadrons, location, and movements, are of importance.

RECONNAISSANCE.—Prisoners should be questioned regarding the identity and distinctive markings of flights assigned to their divisions. It may be possible to identify divisions from the presence of certain flights. The only marking of reconnaissance flights now on record is that of the 7th flight, which has an arrow painted on the fuselage.

#### LANDING GROUNDS NEAR GERMAN HOSPITALS

Red cross panels with landing "T's" attached, which have been repeatedly reported, are Red Cross hospitals with landing ground for airplanes, so that wounded airmen may receive immediate attention. This information has been confirmed through French sources.

#### NEW TYPES OF AIRCRAFT

FROM SUMMARY OF AIR INTELLIGENCE, R. A. F., JUNE 26, 1918.

It has recently been reported from several quarters that a new type of two-seater is being built by the Hannover-Wagon-Fabrik at Linden.

This machine is stated to be a single-engined tractor biplane, with two pairs of struts on either side of the fuselage; it is reported to be fitted with a nine-cylinder rotary engine developing about 140 h. p., said to be a copy of a French engine. (Further confirmation is required.)

#### MERCEDES ENGINES

FROM SUMMARY OF AIR INTELLIGENCE, R. A. F., JUNE 26, 1918.

Fokker biplane scouts which are equipped with 160 h. p. Mercedes engines are now being fitted with the 180 h. p. engine of that make; this work is being carried out in the field. (There is very little difference between the engines externally.)

A large number of 180 h. p. engines are at present stored at the 2d Army Aircraft Park at Aulnoy (Valenciennes).

#### MACHINE GUNS ON TWO-SEATERS

FROM SUMMARY OF AIR INTELLIGENCE, R. A. F., JUNE 26, 1918.

Prisoners recently captured by the French, state that the observers' guns in some two-seater machines are fitted with a device allowing the barrel to be depressed to fire vertically downwards; this is to be used by low-flying machines.

#### SUMMARY OF OFFICIAL COMMUNIQUE

JULY 5, 1918.

##### AMERICAN.

(July 5, 1918, 9 p. m.) Our patrols again took prisoners in the CHATEAU-THIERRY region. There, in PICARDY and in the VOSGES there was brisk artillery fighting. In the VOSGES a hostile raiding party and two patrols which attempted to reach our lines were driven off.

##### FRENCH.

(July 5, 1918, 11 a. m.) Our detachments and patrols operating between MONTDIDIER and the OISE, in CHAMPAGNE, on the right bank of the MEUSE and in LORRAINE took prisoners.

(July 5, 1918, 9 p. m.) There was moderate artillery activity on both sides, more lively S. of the AISNE, especially in the regions of CULRY and MONTGOBERT.

W. of BUSSIARES our troops executed an attack and brought back prisoners.

# BRITISH.

(July 4, 1918, evening, continued.) AVIATION. On July 3 the weather was cloudy. The enemy's air service showed only slight activity. Our machines carried out a number of reconnaissances and as usual did artillery regulating work. Six hostile machines were brought down and four others forced to land disabled.

During the day and the following night we dropped 16 tons of projectiles, the principal objective being the railway junctions at LILLE and COURTRAI. All our machines returned.

(July 5, 1918, morning.) The total number of prisoners taken by us in the successful operations yesterday along the SOMME amount to over 1,300. We also captured one German field gun, over 100 machine-guns and a number of trench mortars. A hostile counter-attack on our new positions E. of HAMEL was easily repulsed last night. We took some prisoners.

We made a successful raid in the sector of BEAUMONT-HAMEL. A hostile attempt in the neighborhood of STRAZEELE was repulsed.

(July 5, 1918, evening.) The number of prisoners we made yesterday during the operations on the SOMME and during the German counter-attack were more than 1,500, 40 being officers. There is nothing else to report except hostile artillery activity near SCHERPENBERG.

AVIATION. Our airplanes cooperated yesterday in the successful attack on the SOMME both by heavy bombarding of the German positions throughout the previous night and by machine gun fire and bombing from low altitudes. Also on hostile troops and transports during the actual operations. On other parts of the front there were reconnaissances and artillery cooperation. Eleven German machines were destroyed and ten were driven out of control. One hostile balloon was shot down in flames. Four of our machines are missing. Our machines on other parts of the front returned safely. Thirty-three and a half tons of bombs were dropped on various objectives during the day and night.

# BELGIAN.

(July 5, 1918, 10.15 p. m.) Artillery activity during the last two days has been of moderate intensity. During the night of the 3d and 4th, after artillery preparation, our troops penetrated into the enemy's lines N. of KIPPE and brought back 43 prisoners and two machine guns, and repulsed a large number of Germans. During the afternoon today a patrol ambushed in the enemy's lines brought back five prisoners.

# ITALIAN.

(July 5, 1918, 5 p. m.) On the Lower PIAVE, after having repulsed a violent counter-attack and destroyed hostile centers of resistance, we considerably extended our territory S. E. of CHIESA NUOVA and N. of CAVA-ZUCCHERINA, capturing 419 prisoners, a battery of 105 mm. howitzers and a large number of machine guns.

N. E. of the GRAPPA our parties, after artillery preparation, penetrated the positions opposite them at the head of the CALCINO Valley. The enemy replied with intense artillery fire and made a counter-attack which developed into hand-to-hand fighting, without succeeding, however, in retaking from us the advantages gained at PORTE DI SALTON. About 30 prisoners, including fire officers, and six machine guns remained in our hands.

On the ASIAGO Plateau we repulsed two counter-attacks at MONTE CORNONE, on the Sasso Rosso, engaging the enemy in bayonet and hand grenade fighting and inflicting severe losses.

A British party surprised and destroyed a hostile post near CANOVE.

AVIATION. During the last few days ten hostile airplanes and two captive balloons were brought down in the course of air fighting.

# GERMAN.

(July 5, 1918, 1.15 p. m.) WEST FRONT. Army Group of Crown Prince Rupprecht. Hostile attacks of some strength YPRES were repulsed. After heavy artillery fire the British made infantry attacks yesterday morning on both sides of the SOMME. On the N. bank of the river the assault was broken up in front of our lines with heavy losses. S. of the SOMME the enemy penetrated the village and wood of HAMEL. On the height E. of HAMEL the attack was broken up by our counter-attack. E. of VILLERS-BRETONNEUX we threw the enemy back to his positions of departure.

In the evening, fighting activity increased almost along the whole front of the army group and continued during the night also particularly in the battle sector of yesterday.

Army Group of German Crown Prince. There was increased fighting on the W. bank of the AVRE and on both sides of the AISNE.

AVIATION. Lt. Menkhoff achieved his 35th and Lt. Thuy his 24th air victory.

(July 5, 1918, 8.32 p. m.) There is nothing new from the various battle fronts.

# AUSTRIAN.

(July 5, 1918, 2.33 p. m.) The fighting on the terrain in the estuary of the PIAVE continued yesterday without interruption. The forces launched by both sides are fighting hard. Strong Italian attacks against our southern wing were checked by counter-attacks. Near CHIESANUOVA the veteran 1st Silesian Regiment by quick action threw out the Italians who had penetrated our positions. Between the PIAVE and the BRENTA the enemy is obstinately continuing his efforts to recapture the positions we had taken on June 15. His main effort yesterday was directed against the region of MONTE SOLAROLO. His assault which advanced as far as our trenches developed into hard hand-to-hand fighting in which a large part of the enemy was destroyed and the rest driven back. The 2d Battalion, 120th Silesian Regiment, and the Bosniaks of the 4th Regiment, splendidly supported by the 1st Graz and 55th Cracow Field Artillery Brigades, have particularly distinguished themselves during three weeks of almost uninterrupted fighting. The losses of the enemy are extraordinarily heavy.

On the Plateau of the SETTE COMUNI and on the Tyrolese front there was artillery activity.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### FLANDERS REGION.

204th Reconnaissance Flight .. Doc., R. A. F., June 4 ..... Previously unlocated.

### LYS-VIMY REGION.

13th Reconnaissance Flight .. Machine down, R. A. F., July 7 ..... In Flanders region, Oct., 1917.  
 18th Pursuit Flight ..... French source, June 6 ..... In Vimy-Combles region, May 16, 1918  
 (This flight was reported in Flanders in June, 1918, but was probably incorrect.)  
 266th Reconnaissance Flight. French source, May 3 ..... In Flanders region, April 21, 1918.

### VIMY-COMBLES REGION.

1st Reconnaissance Flight ... French source, April 30 ..... Not previously identified.  
 6th Reconnaissance Flight ... Document, R. A. F., June 6 ..... In Noyon-Rheims region, Jan., 1918.

### COMBLES-NOYON REGION.

19th Protective Flight ..... French source, June 6 ..... In Vimy-Combles region, April 7, 1918.  
 35th Pursuit Flight ..... French source, May 30 ..... In Vimy-Combles region, April 24, 1918.  
 27th Reconnaissance Flight. Document, R. A. F., May, 1918 ..... In Russia, Sept. 18, 1917.  
 1st Pursuit Squadron ..... Report, R. A. F., July 9 ..... In Noyon-Rheims region, June 11, 1918  
 NOTE. The movement of this squadron consisting of 4th, 6th, 10th, and 11th flights is an important indication of intentions.

### NOYON-RHEIMS REGION.

23d Protective Flight ..... Machine down, R. A. F., June 23 .... In Combles-Noyon region, May 21, 1918.  
 59th Pursuit Flight ..... French source, June 10 ..... In Vimy-Combles region, April 26, 1918.  
 23d Reconnaissance Flight... Report, R. A. F., July 4 ..... In Combles-Noyon region, June 1, 1918.  
 222d Reconnaissance Flight... French source, June 19 ..... In Combles-Noyon region, June 5, 1918.  
 286th Reconnaissance Flight .. French source, June 2 ..... In Rheims-Argonne region, April 1, 1918.  
 (Prisoners captured by the British on July 1, 1918, state that the 5th Bombing Squadron (4th, 5th and 6th flights), was soon to move to the Noyon-Rheims region).

### ARGONNE-MOSELLE REGION.

292d Reconnaissance Flight... French source, Feb., 1918 ..... In Lys-Vimy region, Jan. 9, 1918.

### VOSGES-SWITZERLAND REGION.

267th Reconnaissance Flight. French source, July 2 ..... At Habsheim, July 2, 1918.  
 276th Reconnaissance Flight French source, July 7 ..... Near Molsheim, July 7, 1918.

### EXTERIOR FRONTS (RUSSIA).

16th Reconnaissance Flight .. Document R. A. F., May 4 ..... In Vimy-Combles region, Feb. 15, 1918.  
 (This flight was reported in Vimy-Combles region in Feb., 1918, but was probably incorrect, as it was in Russia previous to that date).

## IDENTIFICATIONS

### MOSELLE-VOSGES REGION

242d Reconnaissance Flight... French source, May 31 ..... At Frescaty, May 31, 1918  
 281st Reconnaissance Flight.. Document, R. A. F., June 8 ..... In Sarrebourg area, June 8, 1918.

## CHANGES IN AIRDROMES—ARGONNE TO SWITZERLAND

FROM A STUDY OF PHOTOS RECEIVED BETWEEN JUNE 1 AND JULY 10 OF AIRDROMES WITHIN TACTICAL DISTANCE OF THE BATTLE FRONT.

Argonne to Moselle :	Number.	Sheds.	Hangars.	Machine capacity.
New Airdromes .....	6	7	18	69
Evacuated airdromes .....	1	..	5	10
Increases to old airdromes .....	..	2	11	37
Decreases to old airdromes .....	..	2	..	4
Total change .....	+5	+7	+24	+92
Moselle to Vosges :				
New airdromes .....	2	..	3	6
Increases to old airdromes .....	..	39	24	247
Decreases to old airdromes .....	..	2	6	17
Total change .....	+2	+37	+21	+236
Vosges to Switzerland :				
New airdromes .....	5	11	13	132
Increases to old airdromes .....	..	8	78	268
Decreases to old airdromes .....	..	13	..	55
Total change .....	+5	+6	+91	+345
Grand total of changes .....	+12	+50	+136	+673

Between the Argonne and the Moselle there are 34 known airdromes of which 12 are occupied—units identified have a strength of about 126 machines.

Between the Moselle and the Vosges there are 36 known airdromes of which 16 are occupied—units identified have a strength of about 72 machines.

Between the Vosges and Switzerland there are 27 known airdromes of which 15 are occupied—units identified have strength of about 120 machines.

There have been no unusual indications of aerial activity, so the increases in airdromes may only be in anticipation of fulfillment of the American program, or for purposes of neutralizing British bombing units.

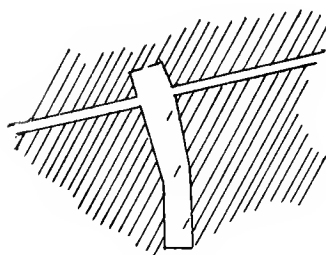
### CORRECTIONS TO AIRDROME MAP

The following airdromes are incorrectly shown on the map of German Airdromes, July 10, 1918. The same are correctly carried on list attached to maps: 4, 12, 37, 40, 67, 78, 79, 144, and 154.

### CAMOUFLAGE OF BUILDINGS FROM BRITISH AIR PHOTOGRAPHS

**I**

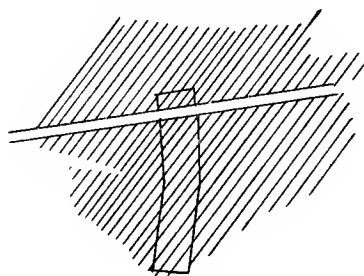
*Under construction*



**II**

*Completed*

*Note path painted across the roof*



Approximate Scale - 100 ft

Air photographs taken recently on the British front show a new type of shelter in the form of long narrow sheds built of framework and tarpaulin, slightly irregular in outline and carefully concealed with camouflage. The roof is nearly flat and the sides are low, thus avoiding shadow. In some cases the shed has been built across a path and the path painted in on the roof.

When under construction, the shed shows up distinctly, light against the ground, but when completed and painted it is comparatively inconspicuous.

### SUMMARY OF OFFICIAL COMMUNIQUE

JULY 13, 1918.

#### AMERICAN.

(July 13, 1918, 9 p. m.) There is nothing of importance to report.

#### FRENCH.

(July 13, 1918, 11 a. m.) In the vicinity of the PORTE Farm, between MONTDIDIER and the OISE, we pushed our advanced posts forward 500 meters during the night. Raids carried out by us N. of the AVRE, in the region of the OISE, along the MARNE and in CHAMPAGNE brought us some prisoners.

(July 13, 1918, 9 p. m.) We carried out a local operation this morning N. and S. of LONGPONT. We advanced our positions toward the E. and in spite of hostile resistance crossed the SAVIERE near the hill of CATIFET Farm. About 30 prisoners fell into our hands.

The number of prisoners taken by us yesterday in the MONTDIDIER region is over 600, we also captured more than 80 machine guns.

#### BRITISH.

(July 13, 1918, 7 p. m.) A raid attempted by the enemy this morning in the neighborhood of BUCQUOY was repulsed with losses.

Excepting some activity of the hostile artillery in the sector of HINGES and at some other points on the British front there is nothing of importance to report.

AVIATION. Heavy rain yesterday limited aerial activity. Nevertheless our machines made reconnaissances and did artillery regulating work during the clear spells. Nine tons of bombs were dropped on railway junctions in rear of the German lines.

Three hostile machines were destroyed during the day and two others forced to land disabled. Three of ours are missing. The weather prevented all night flights.

(July 13, 1918, 10.25 a. m.) British and Australian troops were successful in further minor operations in the vicinity of VIEUX-BERQUIN and MERRIS. They captured 96 prisoners and several machine guns. In the fighting which has taken place in the past two days in this sector our casualties have been exceptionally light.

During the night a British detachment went into the German trenches N. of Hamel and brought back 22 prisoners. An attempted raid by the enemy N. of METEREN failed.

The German artillery has been active opposite BEAUMONT-HAMEL and in the STRAZEELE and LOCRE sectors.

(July 13, 1918, evening.) Last night one of our patrols captured prisoners on the outskirts of BOYELLES. This morning a raid attempted by the enemy S. of BUCQUOY was repulsed. Hostile artillery showed some activity during the day S. of ARRAS.

AVIATION. On July 12, low clouds and heavy showers prevailed on the western front. The enemy's air service showed no activity. Our machines were able to carry out artillery observation only during intervals of clear weather. No combats or losses occurred.

During the night in spite of high wind and clouded skies our aviators made useful reconnaissances and dropped four tons of bombs.

#### BELGIAN.

(July 12, 1918, 10.18 p. m., weekly communique.) During the past week the enemy attempted several raids on our advanced posts but they were repulsed.

We penetrated the German lines and took prisoners.

Hostile artillery was moderately active while ours carried out much fire of destruction and neutralization of batteries.

A hostile balloon was brought down in flames.

#### ITALIAN.

(July 13, 1918, 5 p. m.) Yesterday afternoon the enemy attacked our position on the CORNONE, on the SASSO Rosso with large patrols launched in fan-shaped formation; he was checked by our garrison which with much dash made a bayonet counter-attack and put him to flight, continuing the pursuit to the trenches of departure. Many of the enemy were left on the terrain. Two officers and 64 men were taken prisoner and four machine guns captured. On the rest of the front activity was moderate.

On the PASUBIO, between the FRENZELA and BRENTA Valleys, the artillery of both sides developed greater activity. Hostile scouts were taken, under our fire.

AVIATION. Aerial activity was very lively. During the day ten hostile machines were brought down. Lieut. Scaronia achieved his 30th victory.

ALBANIA. Our troops continue to keep in touch with the enemy N. of SEMENI. During the night of the 11th on the E. of the Lower DEVOLI, N. of BERAT, hostile columns in retreat were attacked and dispersed by our advanced elements. The number of Austrian prisoners taken by us since the 6th exceeds 1,800, including 61 officers.

#### GERMAN.

(July 13, 1918, 1 p. m.) WEST FRONT. Army Group of Crown Prince Rupprecht. S. W. of BAILLEUL repeated attacks by strong British detachments were repulsed. Assaults made by the enemy during the night N. of ALBERT also broke down. In the evening, between CASTEL and MAILLY, on the W. bank of the AVRE, repeated attacks preceded by most intense artillery preparation followed local assaults which had been made in this region during the afternoon. The enemy occupied CASTEL and the heights of ANCHIN. His attacks E. of this line were broken up by our counter-attacks. Between the OISE and the MARNE the fighting continued active. New assaults by the enemy N. of LONGPONT and S. of the OURCQ were repulsed.

Army Group of Duke Albrecht. Fighting increased in the middle VOSGES and at HARTMANNSWEILERKOPF. N. of PONT-a-MOUSSON and in the valley of the FAVE night attacks by the enemy failed.

AVIATION. During June on German fronts, 468 hostile airplanes and 62 captive balloons were shot down, 92 of the former by our anti-aircraft guns. Of these 217 fell behind our lines; the rest were plainly seen to fall behind the enemy's lines. We lost in battle 153 airplanes and 51 captive balloons.

(July 13, 1918, 8.31 p. m.) There are no new developments to report from the battle fronts.

#### AUSTRIAN.

(July 13, 1918, 1.10 p. m.) Reconnaissance skirmishes took place along the VENETIAN mountain front. There is nothing else of importance to report.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### FLANDERS REGION.

274th Reconnaissance Flight..... Prisoner's statement, French.. July 5..... Near Verdun, June 18, 1918.

### LYS-VIMY REGION.

240th Pursuit Flight ..... French source..... June 29 ... In Combles-Noyon region, May 21, 1918.

20th Pursuit Flight..... Document, R. A. F.:..... June 27.... In Vimy-Combles region, Mar: 28, 1918.

### VIMY-COMBLES REGION.

9th Protective Flight ..... Document, French..... May 8 ..... In same region, Dec. 29, 1917.

273d Reconnaissance Flight..... French source..... June 1 .... In Combles-Noyon region, May 10, 1918.

### COMBLES-NOYON REGION.

57th Pursuit Flight..... Document, French..... June 26 ... In Lys-Vimy region, Apr. 9, 1918.

227th Reconnaissance Flight..... Doc., R. A. F..... June 23 ... In Noyon-Rheims region, June 14, 1918.

249th Reconnaissance Flight..... (See note below)..... In Vimy-Combles region, June 3, 1918.

(This flight has not moved, it was reported in the Vimy-Combles region with the 18th Army. American order of battle map 9-7-18 shows the 18th Army in Combles-Noyon region).

### NOYON-RHEIMS REGION.

24th Protective Flight..... Prisoner's statement, R. A. F. June, 1918. In Vimy-Combles region, Dec. 21, 1917.

201st Reconnaissance Flight..... Doc., French..... June 29 ... In Combles-Noyon region, May 1918.

### RHEIMS-ARGONNE REGION.

39th Pursuit Flight..... Doc., French..... May 25.... On Western Front, unlocated, Mar. 21, 1918.

### ARGONNE-MOSELLE REGION.

257th Reconnaissance Flight..... Doc., R. A. F..... Jan. 23.... In Briey area, Jan. 23, 1918.

Twin-engine machines are located at Boulay airdrome (Moselle-Vosges region), and in as much as all known bombing units have been identified in other sectors since June 1, 1918, it is probable that these are the twin-engine machines which have been bombing the Nancy area recently. (R. A. F. 11-7-18).

### EXTERIOR FRONTS.

35th Reconnaissance Flight..... Document, French ..... May 31.... In Russia Nov., 1917.

42d Reconnaissance Flight ..... Document, R. A. F..... June 25, 1918. In Rumania, Sept., 1917.

305th Reconnaissance Flight..... Document, French..... June, 1918.. In Asia, Jan., 1918.

NOTE.—The 9th Protective, 35th, 42d and 305th Reconnaissance Flights had been dropped from our list of flights owing to the fact that no recent information had been obtained concerning these units.

## AIRDROMES

### ARGONNE-MOSELLE.

#### 1. Changes in existing airdromes.

	Sheds.	Hangars.	Capacity.
13. Buxieres .....			
Latést British report shows 3 hangars and 3 sheds here.	+3	—8	—13
14. Marimbois.....			
These were there in May but were not clear on photograph.	....	+4	+10
30. Marville.....	+2	+2	+16
31. Morfontaine.....		+2	+8
42. Mercy le Bas .....		+3 (small)	+3
57. Stenay.....		....	+6
There was no photo. available until 14-7-18 to estimate capacity.			
75. Mouzon, N. ....		....	+17
No photo, available until 16-7-18 to estimate capacity.			
80. Mouzay .....		....	+5
No photo, available until 16-7-18 to estimate capacity.			
81. Constantine .....	—4	+4	+2
Recent photo. shows that previous report was incorrect.			
83. Murville .....	+2	....	+8

#### 2. Reported airdromes shown by photographs not to exist.

- 138. St. Laurent.
- 153. Aumetz.
- 154. Fillieres.

### MOSELLE-VOSGES

#### 1. Changes in existing airdromes.

8. Morhange.....	—15	....	—60
Photo. shows that a previous report was incorrect.			
17. Thionville .....	....	+4	+4
These hangars were there in June but were not covered by photo.			
45. Bensdorf .....	—1	....	—3
Photos. show that a previous report was incorrect.			

#### 2. Reported airdromes requiring confirmation by photograph.

- 142. Thal, 15-7-18.
- 153. Ham, 15-7-18.
- 156. Blieskastel, 15-7-18.

#### 3. Reported airdromes shown by photograph not to exist.

- 143. Lesses.

## VOSGES-SWITZERLAND.

1. *New airdromes.*

		Sheds.	Hangars.	Capacity.
88.	Altdorf .....		+13	+26
	(Formerly 143). Three hangars under construction. 276th Reconnaissance Flight identified there.			
89.	Stolzheim .....		+8	+16
	(Formerly 124). Seven hangars under construction.			

2. *Changes in existing airdromes.*

15.	Dietwiller .....	+1 (Large)	—1	+24
21.	Strassbourg .....	+4	—1	+56
	Complete airdrome is not shown in photograph.			
22.	Colmar, N. ....	+9	—2	+28
24.	Rustenhardt .....		+12	+24
33.	Schlestadt .....		+9	+18
66.	Mittlebronne .....		+2	+8
	Other hangars under construction.			

3. *Reported airdromes requiring confirmation by photograph.*

138. Duttelheim, 11-7-18.  
 143. Diefenbach, 15-7-18.  
 154. Durlach, 15-7-18.  
 157. Hertigen, 15-7-18.

## REWARDS FOR SALVING HOSTILE AIRPLANES

FROM BRITISH SUMMARY OF AIR INTELLIGENCE, JULY 10, 1918.

The *Arbeiter Zeitung* (Essen) of June 21 quotes the following statement of the representative of the General Commanding the Army Corps of the district:

"It has frequently occurred that enemy flying machines have landed on this side of the area of operations, partly by force of circumstances, and partly in error of their whereabouts. The crews of the machines generally attempt to destroy the airplane and to escape. Their failure to do this is frequently owing to the prompt and determined intervention of individuals, military or civilian. These acts are often fraught with danger to life and limb for these persons, and also demand circumspection, fearlessness, and at times expense. It is very important immediately to seize the airman and to save the machine, either wholly or as much undamaged as circumstances allow. The War Ministry has, therefore, sanctioned the public recognition of, and payment to, civilians who have particularly distinguished themselves for their efforts to hold the airman or save the machine. Sums of money will be paid for the salvage of hostile machines according to their importance. As to rewards for the seizure of the crews of hostile airplanes, sums up to 50 marks will be paid to civilians. The amount of reward will in every case be fixed by the representative of the General Commanding."

## SUMMARY OF OFFICIAL COMMUNIQUE

JULY 18, 1918.

## AMERICAN.

(July 18, 1918, 9 p. m.) American troops, co-operating with the French in an attack on the enemy's positions between the AISNE and the MARNE, penetrated his lines to a depth of several miles, capturing many prisoners and guns.

## FRENCH.

(July 18, 1918, 12.50 p. m.) This morning we attacked the German positions from the region of FONTENOY on the AISNE as far as the region of BELLEAU. We advanced at some points to a distance of two or three kilometers. The capture of prisoners is reported.

On the MARNE front and in CHAMPAGNE there was no change in the situation during the night.

S. W. of NANTEUIL-LA-FOSSE we checked a violent thrust by the enemy.

An attack N. of PROSNES carried out by Guard troops broke down completely.

(July 18, 1918, 9 p. m.) After having broken the German offensive on the fronts of CHAMPAGNE and the Mountain of RHEIMS during the days of July 15, 16 and 17, French troops co-operating with the Americans on July 18, attacked the German positions between the AISNE and the MARNE on a front of 45 kilometers.

Starting from the front AMBLENY, LONGPONT, TROESNES, BOURSCHES, we have effected an important advance into the enemy's lines. We have reached the plateaux which dominate SOISSONS on the S. W. and the region of CHAUDUN. Between VILLERS-HELON and NOROY-SUR-OURCQ violent fighting is in progress. S. of the OURCQ our troops have passed the general line MARIZY-STE. GENEVIEVE, HAUTE-VESNES, BELLEAU. More than 20 villages have been retaken by the admirable dash of the Franco-American troops. Several thousand prisoners and a large amount of booty have fallen into our hands.

There is nothing of importance to report from other parts of the front.

AVIATION. The aviation continued to play a brilliant role in the battle during the days of July 16, 17. On July 16, our bombing machines incessantly attacked the bridges over the MARNE and hindered the passage of hostile troops. The latter upon being attacked by machine guns and bombs as they were debouching on the N. and S. banks of the river suffered severe losses and were several times dispersed. The bridge which the enemy threw across opposite DORMANS collapsed after being heavily bombed. The transports of troops which were crossing it were hurled into the stream. Our bombing machines likewise carried out expeditions over the billets; railway stations, munition dumps and troops assembly points in the rear of the enemy's front. Twenty-one tons of projectiles were dropped during the day and 14 tons during the night. Considerable damage was observed to have resulted and a violent explosion occurred in the station at MAISON BLEUE. Fire broke out in the stations at COUCY LES EPPES and BAZOCHES.

Our airplanes with their habitual during fought numerous combats over the enemy's lines. Twenty-nine German machines were shot down or forced to land disabled and five captive balloons were set on fire.

On July 17 in spite of the violent wind and heavy rains our machines took the air and attained good results. Twelve German machines were shot down and four captive balloons destroyed.

In the course of the attacks during the crossing of the MARNE 5,600 kgs. of explosives were employed.

## BRITISH.

(July 17, 1918, continued.) AVIATION. Yesterday showers and storms again hindered aerial operations. During the intervals of clear weather, our aviators carried out reconnaissances, bombardments and artillery work. Thirteen tons of bombs were dropped on the enemy's aviation fields and munition depots, on the mole at ZEEBRUGGE, and on hostile billeting areas, especially on ESTAIRES and MERVILLE. Ten hostile planes were brought down and four others forced to land disabled. In addition six hostile balloons were set on fire. Nine of our machines are missing.

During the night, in spite of the bad weather, our bombing machines dropped 500 bombs on the railway sidings at SECLIN and on various billets. All our machines returned.

A large hostile bombing plane was brought down behind our lines.

## SUMMARY OF AIR INFORMATION, No. 34, JULY 19, 1918.

(July 18, 1918, 10 a. m.) In the region of VILLERS-BRETONNEUX the Australians successfully carried out a local operation, and advanced their line to the S. E. of the village on a front of more than 1,500 meters. In the course of the operation we captured a number of prisoners, two field guns and some machine guns.

We also slightly improved our position E. of HEBUTERNE during the night. We made a successful raid S. of that village and repulsed a hostile party that attempted a raid S. of BUCQUOY.

The hostile artillery showed considerable activity during the night N. of BAILLEUL.

(July 18, 1918, evening.) This afternoon Yorkshire troops carried out a successful raid S. W. of ROBECQ and took 30 prisoners. Outside of artillery activity on both sides there is nothing further to report from the British front.

### GERMAN.

(July 18, 1918, 12.52 p. m.) WEST FRONT. Army group of Crown Prince Rupprecht. We repulsed local hostile attacks N. of LENS and E. of VILLERS-BRETONNEUX.

The moderate activity increased during the evening and intermittently became more intense during the night S. W. of YPRES and in the course of the renewal of hostile attacks E. of VILLERS-BRETONNEUX. Prisoners were taken in the course of active reconnoitering.

Army group of the German Crown Prince. The army of General von Boehn was in heavy fighting yesterday. The enemy, reinforced by fresh divisions, began a large general counter-attack, after an artillery preparation lasting several hours, on our whole front S. of the MARNE. The battle was decided in our favor during the evening. The enemy's attacks were broken up under very heavy losses. The enemy, who had temporarily penetrated small villages S. E. of MOREUIL, was again thrown out by our counter-attack. On the N. bank of the river also the enemy's attempts to contest our successes broke down. In the course of the assault of a ridge S. of POURCY we captured the garrison together with the commander of the regiment and several guns.

E. of RHEIMS the situation remained unchanged. Artillery fire was of varying intensity. N. W. of MASSIGES the enemy made minor attacks which were broken up under our counter-attack.

AVIATION. Yesterday 23 hostile machines were shot down. Lieutenant Jacob won his 23d air victory.

(July 18, 1918, 8.35 p. m.) Between the AISNE and the MARNE the French attacked with strong forces and tanks and have gained some ground. Our reserves in readiness have entered the battle.

### AUSTRIAN.

(July 18, 1918, 8.40 p. m.) No events of special importance occurred in Italy.

In Albania the enemy established contact with our outposts.

Naval Operations. On the morning of July 17, about 200 bombs were dropped on POLA by several squadrons of hostile airplanes and hydroplanes. Two hundred workmen were killed and a number wounded. The damage done is insignificant.



SUMMARY OF AIR INFORMATION

CHANGES IN LOCATION OF UNITS

FLANDERS REGION.		
16th Protective Flight .....	Belgian source, July 18.....	In Vimy-Combles region, April 9, 1918.
VIMY-COMBLES REGION.		
211th Reconnaissance Flight..	Pris. stat., R. A. F., June 10.....	In Flanders region, Feb. 2, 1918.
MOSELLE-VOSGES REGION.		
199th Reconnaissance Flight..	Doc., R. A. F., June, 1918.....	Not previously identified.

AIRDROMES

ARGONNE-MOSELLE REGION.			
1. <i>New airdromes.</i>	Sheds.	Hangars.	Capacity
90. Buzancy (formerly 117).....	..	10	20
Photo 11d French Army, May 19, 1918. Occupied at that time.			
91. Landreville (formerly 130).....	..	6	12
Photo 11d French Army, June 7, 1918.			
MOSELLE-VOSGES REGION.			
The airdrome at Friesdorf (86) is being used as an emergency airdrome for bombing units at Boulay (61). Considerable damage has been done at Boulay by British bombing units.			
VOSGES-SWITZERLAND REGION.			
1. <i>Reported airdromes, requiring confirmation by photograph.</i>			
117. Rastatt. Reported July 18, 1918.			
124. Erstein. Reported July 19, 1918.			

CHANGES IN AIRDROMES—ARGONNE TO SWITZERLAND

CONFIRMED BY PHOTOGRAPHY—JULY 14 TO 20.

Region.	Change.	Total airdromes.	Change in machine capacity	Total machine capacity.
Argonne-Moselle .....	+ 2	36	+ 94	742
Moselle-Vosges .....	.	26	—59	876
Vosges-Switzerland .....	+ 2	29	+ 242	1,146
Total.....	+ 4	91	+ 277	2,764

DISTRIBUTION OF IDENTIFIED GERMAN AIR FORCES JULY 17, 1918

FLIGHTS BY CLASS.						
Region.	Pursuit (15 machines).	Bombing (8 machines).	Protective (6 machines).	Reconnaissances (7 machines).	Total Flights.	Machines.
Flanders.....	9	9	2	11	31	296
Lys-Vimy .....	12	6	5	19	42	391
Vimy-Combles .....	3	..	3	21	27	210
Combles-Noyon .....	26	9	15	31	81	769
Noyon-Rheims.....	16	3	11	30	60	540
Rheims-Argonne.....	4	..	1	4	9	94
Argonne-Moselle .....	2	..	..	10	12	100
Moselle-Vosges .....	2	..	..	7	9	79
Vosges-Switzerland .....	2	..	..	11	13	107
Exterior Fronts .....	2	..	..	9	11	93
Interior Fronts.....	..	..	..	2	2	14
Unlocated.....	3	..	..	2	5	59
Total flights .....	81	27	37	157	302	
Total machines .....	1,215	216	222	1,099	2,752	2,752

NOTE.—One pursuit, two protective and 47 reconnaissance flights have been dropped as not identified in last six months. It is believed that these units may have been disbanded in order to form up new pursuit flights organized this spring. Strength in machines is based on estimate of average in commission.

GERMAN PRECAUTIONS TO DISGUISE INTENTIONS

The measure of secrecy used by the Germans in their preparation for recent offensives necessitate counter precautions. The following is a summary of the methods by which the enemy attempts to hide his intentions.

“SECRECY ORGANIZATION (FROM BRITISH SUMMARY OF INFORMATION, JULY 16, 1918) :

“Army Security officer : In order ‘to study the necessary measures to insure the secrecy of operations and to supervise the execution of these measures’, the XVIIIth German Army (in orders dated April 2,

1918, Ia. M. No. 65) appointed a General Staff Officer as the 'Army Security Officer' (*Sicherungsoffizier*), at the head of Section Ia. M. 2 of the Army Staff.

"Group and Divisional Security Officers: In the same orders, it was laid down that a General Staff Officer should be detailed in each group and division to perform similar duties.

"Regimental Security Officer: From a captured order of the 16th Inf. Regt., 14th Div., dated June 27, 1918, it appears that, in infantry regiments, an officer is detailed to carry out the duties of 'Regimental Security Officer'

"Supervising Officers: The same order also states that the sector of the 14th Div. was divided into four security zones, to each of which was allotted a 'Supervising Officer'. The duty of these officers was 'to satisfy themselves personally that measures of security were taken in their area.' They were 'responsible that all new constructions, which could be observed by hostile air reconnaissance, should, both while under construction and afterwards, be continually camouflaged against air observations.'

"Zone of Observation: In the orders of the 11d German Army, dated January 22, 1918, extracts from which were given in Ia/ 48312, Annexe to G. H. Q. Summary of April 10, 1918 (*Summary of Information*, No. 14), it was laid down that, in order to conceal movements, groups were to divide the forward area into zones of observation:—

"Zone I. The zone under enemy observation from the ground.

"Zone II. The zone under enemy observation from balloons.

"Certain restrictions of movement by day in these zones were laid down, the strength of parties and the interval between them being limited according to conditions of visibility.

"Similar restrictions are still in force, probably universally, as shown by a captured map of the Hamel sector, dated May 22, 1918, and orders of the 6th Inf. Regt., 14th Div., on the Aisne front, dated June 27, 1918, in which two zones of observation are clearly laid down, together with orders restricting movement in these zones."

#### ORGANIZATION OF TERRAIN.

As a general rule camouflage is erected before new work is started. Mortar is plastered on the surface of wet concrete work, and into this moss, roots, and weeds are stamped. Otherwise the concrete is painted in large irregular patches of different colors. In constructing new trenches and excavations, short angles, steep slopes, and exposure of new soil is avoided as much as possible. New communication trenches of common use are either tunnelled at 15 or 20 feet below the surface, or disguised by covering them with netting on which straw and branches are placed. The whole is then covered with sods or sprinkling of earth. Emplacements are constructed so as to arrange gun pits at irregular intervals. These pits are connected by trenches which are continued well out on either flank to give them as much as possible the appearance of the ordinary trench. Another practice is to make conspicuous tracks to dummy gun positions near occupied emplacements. Great care is taken to conceal gun pits for new batteries while under construction and if no screen or netting is actually erected over the gun, screens or brush wood are kept close at hand to throw over the new work upon the approach of Allied observers. When gun pits are made in woods there is little clearing and wires with branches of small fir trees attached are hung over the gun.

#### MOVEMENT.

By Day. This has been restricted to small bodies. Unnecessary circulation has been forbidden, and guns, caissons and wagons are parked under cover. Camouflaged tops are provided for such vehicles as it is necessary to move. Visible roads in forward areas where daylight movement is attempted, are masked by screens of camouflage. Dummy screens are erected at varying distances from the road to deceive artillery observers.

By Night. All movements of large bodies are effected at night. Unnecessary noise, lights and fires are forbidden. Troops are instructed to halt and remain motionless if Allied aviators drop parachute flares.

#### INFANTRY.

Assaulting troops are not necessarily placed in the front line previous to the attack. They move up during the night preceding, and pass through the sector troops to the attack.

#### ARTILLERY.

Larger masses of artillery have been used than ever before, but the increase has not been revealed prior to the attack. To gain surprise the preparation has been much shortened. Secrecy in the concentration and preparation of the artillery for their tasks is obtained by:

1. Movement and occupation at night with strictest march discipline;
2. Minimum preliminary adjusting fire.

Occupation. Little or no work is done on new emplacements. Careful movement begins some days or even weeks before the attack and batteries are put in old positions, of which there are generally a large number. If these new batteries are located they are apt to be mistaken for nomad pieces from old batteries. The remaining artillery is kept well hidden in rear and brought up at the last moment to occupy open positions. When necessary to construct new protected positions, the greatest care is used to camouflage them and they are not occupied until absolutely necessary.

Adjustments. Neutralization is substituted for destruction wherever possible, and gas is largely used. This enables much of the work to be done without preliminary adjustment. Tasks are minutely divided, those requiring precision fire are assigned to batteries already in the sector. The absolutely necessary adjustment of new batteries is accomplished very carefully, other batteries ceasing fire so that no increase is noted. Neutralization of battery positions, villages, camps, etc., by gas does not require precision fire. On certain points precision is compensated for by volume of fire. Destruction of front line positions is accomplished by trench mortars. The accompanying batteries destroy strong points with direct fire at short range during the infantry advance. Sufficient data is obtained by new batteries occupying old positions from notes of those positions. For new positions where absolute precision is not required, the map gives sufficient data. Batteries in open positions, brought up just before the attack, can use direct fire.

In the days immediately preceding the attack, there has been a noticeable decrease in artillery activity. Anti-aircraft fire is increased.

## SIGNAL COMMUNICATION.

**Radio-telegraphy.** Radio activity is carefully controlled so as to give an indication of changes in troops. Before the March offensive there was greatly increased activity in certain areas, while in others radio communication practically ceased. Along the front actually attacked, the number of messages exchanged per day was kept normal. Other attacks have occurred, some following a period of great radio activity, others after radio activity has appeared to cease entirely.

Most stations change their call signs daily, and frequently make use of two or more call signs on the same day, so that the number of stations in an area may be increased or decreased without apparent change in the number of calls. Some cases have been reported in which the enemy appeared to move his radio stations from place to place during the day, at the same time changing the call letters, the wave length and the tone. These instances have, however, been few and have not been definitely confirmed.

**Earth-telegraphy.** This means of communication is used only near the front line. Messages are few in number, except in certain areas where activity has been increased for short periods, evidently for the purpose of attracting attention to those areas.

**Telephone.** Elaborate precautions are taken to prevent the interception of telephone conversation. No lines except those to observation posts are permitted in advance of battalion headquarters. Lines connecting adjoining battalions are required to run well to the rear in the form of the letter "V" or "U". When regiments use the telephone to the rear, all lines running to the front are required to be disconnected.

**Use of Code and Cipher.** Orders respecting the use of code and cipher cover the most minute details. No message sent by radio or earth-telegraphy is permitted to contain any words in clear. It is ordered that messages sent in one code must never be repeated in any other code, or in clear. The sending of form reports is prohibited. If similar messages are required to be sent, the forms of the sentences must be made different in each. Many meaningless code groups are inserted at random. The use of unnecessary words is forbidden. Many messages are so condensed that even when correctly decoded, they convey information only to one familiar with the circumstances and with what has gone before. Great importance is attached to the proper use of code. An officer appears to be attached to each divisional or corps area, for the purpose of checking any indiscretions.

## AIRCRAFT.

**Balloons.** The crews of additional balloons assigned to an offensive front receive their training by ascending from the beds of balloons known to the sector.

**Pursuit.** This class of airplane has usually not made its appearance until a few days before an offensive. They have then usually established a defensive barrage for the purpose of preventing Allied reconnaissances. Just preceding the attack they may become very aggressive, and are especially active against balloons.

**Reconnaissances.** There have usually been a number of deep reconnaissances two or three weeks preceding an offensive. These are made by single machines. Adjustments, as already noted, have been very limited.

**Bombing.** These units have usually operated in back areas during all favorable nights of the week preceding an offensive. Their objectives have been billets, dumps, and transportation centers.

## COUNTER PRECAUTIONS.

The precautions of the enemy, as outlined above, make increased vigilance on the part of the observers necessary. There remain plenty of indications to be properly observed and reported. Among the methods of obtaining these may be mentioned :

**Organization of terrain.** Location of working parties and comparison of photographs. Increases in dumps, airdromes and hospitals in forward areas, are especially significant. Increase in number of anti-aircraft guns is also usually an indication.

**Movement.** Careful observation and recording of train movements, making airplane reconnaissances by night and at dawn and sunset.

**Infantry.** Frequent raids, interrogation of prisoners as to occupancy of back areas, and visual observation of rear billeting areas.

**Artillery.** Observation and thorough recording of information on batteries in action, suspected emplacements, and co-ordination of shelling with appearance of hostile airplanes. Vicinity of emplacements should be watched for increases in munition dumps. Anti-aircraft fire usually increases before an offensive.

**Signal Communication.** Location of radio stations by observers or photographs. Location of telegraph and telephone lines from photographs.

**Aircraft.** Observation of routes and attitude of hostile aircraft, especial attention being given to routes of long distance reconnaissances and hostile bombing objectives.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### LYS-VIMY REGION.

24th Protective Flight .....	Document, R. A. F., June 30 .....	In Noyon-Rheims region, June, 1918.
213th Reconnaissance Flight .	Document, R. A. F., April 22 .....	In Vimy-Combles region, Apr. 17, 1918.
228th Reconnaissance Flight	Document, R. A. F., June 24 .....	In Noyon-Rheims region, June 6, 1918.

### COMBLES-NOYON REGION.

8th Bombing Squadron .....	Pris. Stat., French, July 22 .....	In Flanders region, June 1, 1918.
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(25th, 26th and 27th Bombing Flights.)

### NOYON-RHEIMS REGION.

1st Pursuit Squadron .....	Pris. Stat., R. A. F., July 15 .....	In Combles-Noyon region, July, 1918.
(4th, 6th, 10th and 11th Flights.)		
3d Pursuit Squadron .....	Pris. stat., R. A. F., July 1 .....	In Combles-Noyon region, May 30, 1918.
(34th, 77th and 78th Flights.)		
271st Reconnaissance Flight ..	Mach. down, R. A. F., July 15 .....	In Rheims-Argonne region, Dec. 22, 1917.

### RHEIMS-ARGONNE REGION.

5th Bombing Squadron .....	Pris. stat., R. A. F., July 17 .....	In Lys-Vimy region, July 3, 1918.
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(4th, 5th and 6th Flights.)

NOTE.—This squadron moved from the Tournai area about July 4, 1918. Previous prisoners' statements are now confirmed.

### MOSELLE-VOSGES REGION.

38th Reconnaissance Flight ..	Document, R. A. F., June 27 .....	In Balkans, Oct., 1917.
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### EXTERIOR FRONTS.

300th Reconnaissance Flight .	Document, R. A. F., May 23 .....	Same region (Palestine), Dec., 1917.
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NOTE.—The 38th, 271st and 300th Reconnaissance Flights had been dropped as not having been identified in the last six months.

## AIRDROMES

### ARGONNE-MOSELLE REGION.

1. Changes in existing airdromes.	Sheds.	Hangars.	Capacity.
9. Mars la Tour .....	—1	..	—4
Changes since June 30, 1918.			
43. Preutin .....	+1	..	+6
Change since July 26, 1918.			
59. Porcher .....	—4	+2	0
The above is not a change. Last photograph was not clear.			
80. Mousay .....	—1	..	—5
The accommodation is now four sheds with a capacity of 15.			
85. Giranmont .....	..	+1	+3
Change since July 7, 1918.			

### MOSELLE-VOSGES REGION.

1. Changes in existing airdromes.			
6. Buhl .....	..	+3	
Change since June 9, 1918. Another hangar is under construction.			
8. Morhange .....	—1	+2	—6
Five hangars have been constructed since June 13, 1918. Three hangars and one shed were destroyed in an air raid by a British bombing unit July 17, 1918.			
45. Bensdorf .....	..	+1	+2
Change since May 29, 1918.			
61. Boulay .....	..	+2	+2
Change since July 7, 1918. Others are under construction.			
86. Friesdorf .....	..	+2	—5
This airdrome is now known to be used for bombing machines and will not be carried on the scout capacity basis. It has nine hangars with capacity of nine bombing machines.			

### 2. Vacated airdromes.

58. Baudrecourt .....	..	—2	—4
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### 3. Reported airdromes requiring confirmation by photograph.

130. Retonfey—reported July 16, 1918.
158. Fey—reported July 16, 1918.
159. Genesdorf—reported July 16, 1917.

### 4. Reported airdromes photographed and found not to exist.

### VOSGES-SWITZERLAND REGION.

100. Han sur Nied.
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### 1. Changes in existing airdromes.

33. Schlestadt N. ....	..	+8	+16
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### 2. Reported airdromes requiring confirmation by photograph.

160. Epfig—reported July 20, 1918.
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NOTE.—A prisoner, captured on July 15, 1918, reports having seen a train-load of airplanes at Strassbourg recently. Another prisoner claims that about May 15, 1918, there were 20 machines at the Griesheim airdrome (38).

## ACTIVITY OF GERMAN AIR FORCES

JULY 10-16, 1918.

*Flanders.*—Activity remains slight, the enemy appearing to concentrate his activity on morning and evening flights, apparently concentrating his machines for work during bright intervals, into formations of about fifteen machines.

*Lys-Vimy.*—Scout activity increased slightly N. of the La Bassee Canal, otherwise below normal. Forward areas bombed on two nights.

*Vimy-Combles.*—Slight generally, some scout activity between Albert and the Somme. Reconnaissance of forward areas north of Albert, two on back areas, two of Doullens area and forward areas south of Arras.

*Combles-Noyon.*—Below the average. Two reconnaissances on Creil, bombing of Compiègne regions and cantonnments of Oise Valley on nights of 15th and 16th.

*Noyon-Rheims.*—During the first part of the week activity was below that of the previous week in spite of good visibility, with the exception of an unusually high number of adjustment machines—thirteen in all. What activity there was centered between the Marne and Rheims. On the 14th very feeble except for a little chasse activity between Chateau Thierry and the Ardre. On the 15th there was great activity from Chateau Thierry to Rheims, chasse planes forming a constant barrage over their lines, while low-flying biplanes attacked Allied troops. On the 16th activity was even greater, aerial barrages against our planes and low-flying patrols of 20-30 machines firing upon our infantry, even during the night.

*Rheims-Argonne.*—Up to the 14th activity was below normal, on the 15th a large number of low-flying planes fired on troops and on the 16th they were both numerous and active. Lines of communication were bombed at night on the 15th and 16th.

*Argonne-Moselle.*—Since June 25th activity in this sector has increased, but between July 10th and 15th it was inconsiderable. On the afternoon of the 15th, it became strong and aggressive and on the 16th increased, being specially active in preventing our machines from crossing the line, especially between the Argonne and the Meuse.

*Moselle-Vosges.*—Nothing notable except bombing of area East of Nancy on night of 11th; one reconnaissance on Toul the 12th, Luneville the 14th, a slight increase on the 15th and a reconnaissance on Epinal, Dombasle and Luneville the 16th.

*Vosges-Switzerland.*—Several deep reconnaissances on Lure, Luxeuil, Remiremont, a few bombs on front areas on the night of July 15th. A slight increase in activity on the 16th, otherwise quiet.

#### JULY 17-23.

*Flanders.*—An increase of scout activity, chiefly between Ypres and Roulers-Thourout area, some night bombing of Poperinghe area on the 17th and 18th.

*Lys-Vimy.*—Moderate, except for an increase on July 22d. Bombing activity slight, increase of two-seater activity.

*Vimy-Combles.*—Scout activity slight, until 22d when it increased, two-seaters slightly more active, forward billeting areas bombed on two nights.

*Combles-Noyon.*—Slight during day in first part of week, considerable increase of chasse and reconnaissance activity on the 20th, reconnaissances of Clermont-Creil-Crevecoeur region being followed by bombardment of those areas on the next night. Except for continuous reconnaissance of our back areas by day and occasionally at night, activity was slight for the rest of the week.

*Noyon-Rheims.*—Scout activity steadily decreased during the week, although many reconnaissances of our back areas continued. Considerable bombardment on night of July 19th in Chateau Thierry region.

*Rheims-Argonne.*—Heavy bombardment of Chalons on night of 18th, particularly aggressive near Les Monts on 19th, great bombardment activity on night of 21st and a few bombs on Mezy-Montmirail R. R. on the 22d, otherwise decreased.

*Argonne-Moselle.*—Bombing of Pompey and Toul areas on three nights, a great temporary increase of chasse activity on July 19th, numerous reconnaissances of Toul, Nancy, Dombasle region, probably for bombing purposes.

*Moselle-Vosges.*—Increased on 19th, otherwise feeble.

*Vosges-Switzerland.*—During the week there was considerable reconnaissance of our back areas with the apparent intention of noting the possible despatch of reinforcements to the Champagne region. Otherwise activity was insignificant.

#### ENEMY BOMBING

FROM SUMMARY OF AIR INTELLIGENCE, R. A. F., JULY 20, 1918.

A study of the enemy's bombing activity behind our lines, coupled with prisoners' statements and captured documents, shows the following points of interest:

During June, the enemy concentrated on the bombing of Dunkerque, Calais, Boulogne, Etaples, Abbeville, and the area between Arras, Doullens and Amiens.

At the beginning of July, there was a distinct change in this policy; a decrease in activity over the Etaples-Abbeville areas may be directly connected with the transfer to Champagne of the 5th Bombing Squadron, which was mainly responsible for the bombing of these districts. The 6th Squadron, which had also concentrated on these places, has latterly been carrying out scattered bombing on the general lines Lillers-St. Pol-Doullens.

On the night of the 13th-14th July, there was great activity over all the target areas mentioned above, excepting the Arras-Amiens district, and it appears probable that the bombing of the Channel ports was carried out by the Third Bombing Squadron. It may be mentioned that this squadron has been remarkably inactive and has carried out little work, except for the bombing of Dunkerque.

The area Arras-Amiens has not been concentrated on during July; this was the objective of the Fourth and Seventh Bombing Squadrons (Mons-en-Chaussee and Guizancourt), and it is probable that these units are now operating on the front in the vicinity of the Aisne in connection with the Champagne offensive; this would not necessitate a change of aerodromes.

It is interesting to note that the standard of efficiency in carrying out bombing operations is not

high ; the 6th Bombing Squadron, which, according to documents and prisoners' statements, was ordered and claims to have bombed Aire, Longpre, Lillers and St. Pol on the nights of the 7th-8th, 12th-13th, 13th-14th and 15th-16th July, respectively, in reality did not reach these places at all. This is particularly noticeable in the case of Longpre, no bombs having been dropped within 15 miles of this place ; this was a special target, and at a conference, the importance of reaching this target was particularly emphasized by the O. C. Seventh Flight.

Operations on the night of the 13th-14th July were especially mentioned in the following day's German G. H. Q. Communique. More than half the targets claimed to have been attacked were not reached.

#### ENEMY BOMBING TACTICS

FROM SUMMARY OF AIR INTELLIGENCE, R. A. F., JULY 21, 1918.

Prisoners of the Sixth Bombing Squadron, captured recently, state that the average height from which they bomb at night is about 9,000 to 10,000 feet ; in exceptional cases, they have come down to 6,500 feet over the target.

The lines are usually crossed at about 10,000 feet, a straight compass course being generally flown to the target ; the observation of land marks is also resorted to as an auxiliary measure.

#### EMPLOYMENT OF PURSUIT FLIGHTS

FROM THE FRENCH.

In addition to those pursuit flights operating under the commander of a pursuit squadron or pursuit group, independent flights are allotted to Armies and work directly under the Army Aviation Commander.

Apart from carrying out line patrols, these flights hold a number of machines in readiness for action, in the event of abnormal activity of our airplanes, more especially of our day bombing machines.

On the approach of one of our bombing formations, the pursuit flight is warned (by wireless) ; all available machines are then immediately sent up to attack the formation.

#### TRAINING OF GERMAN AIRMEN

FROM SUMMARY OF AIR INTELLIGENCE, R. A. F., JULY 20, 1918.

The following is extracted from the German Press of the 30th May :—

"Great are the successes of our Aerial Forces on all the Fronts, and equally great are the demands made on our Aviation Reserves. The *Deutscher Fliegerbund*, which was formed with the consent of the General commanding the Aerial Forces, aims at bringing these demands to the notice of future airmen, if possible before they start their military training. The local branch, in Bremen, of the *Deutscher Fliegerbund* have, therefore, instituted a recruiting center in the premises of Sohlke Bros., Altenwall 20.

"In addition to giving technical training, the local committee are going to institute gliding flights (*Gleitflügen*) in order to give the pupils as soon as possible complete confidence in the air. Application forms and further details are to be had from the firm of Messrs. Sohlke Bros., Altenwall 20.

"The annual subscription for young airmen of from fifteen to eighteen years of age is four marks ; for those over eighteen, five marks quarterly."

#### SUMMARY OF OFFICIAL COMMUNIQUE

JULY 27, 1918.

##### AMERICAN.

(July 27, 1918, 9 p. m.) Between the OURcq and the MARNE the enemy's resistance has broken down. Our troops and those of our allies are in pursuit.

##### FRENCH.

(July 27, 1918, 11 a. m.) On the right bank of the MARNE our troops have advanced their lines to the N. of PORT-A-BINSON.

On the CHAMPAGNE front we carried out a local operation in the region S. of MONT-SANS-NOM and made an advance of 1 km. on a front of about 3 km. We took 200 prisoners, including seven officers.

(July 27, 1918, 9 p. m.) Under the continuous pressure which the troops of the French and their allies have been exerting for several days against the Germans, the latter yielded today along the entire front N. of the MARNE. Our troops following close upon the enemy's rear guards, have reached the general line BRUYERES, VILLENEUVE-SUR-FERE, CHAUMUZY. We have progressed a considerable distance beyond the right bank of the MARNE and our troops are continuing their advance more than 15 kilometers N. E. of CHATEAU-THIERRY.

On the CHAMPAGNE front the number of prisoners which we took in the region S. of MONT-SANS-NOM exceeds 300, including nine officers.

##### BRITISH.

(July 27, 1918, 9.55 a. m.) During the night several of our detachments penetrated the enemy's lines near SAILLY-LORETTE, NEUVILLE-VITASSE, ARLEUX-EN-GOHELLE and LENS and took prisoners.

German artillery was active last night between the SOMME and the ANCRE.

In the LA BASSEE Canal sector the artillery of both sides was active.

##### BELGIAN.

(July 26, 1918. Weekly communique.) Last week our reconnoitering patrols operated successfully, particularly near WIELTJE, LANGEMARCK, DIXMUDE and in front of NIEUPORT. We captured about 15 prisoners near WIELTJE and repulsed a German reconnaissance in the NIEUPORT region.

The usual artillery actions occurred on the entire front, particularly S. of the YSER. We directed much fire on the enemy's communications. Several of our cantonments were shelled at night by the enemy's artillery and airplanes. During the night of July 21-22 a German machine was shot down by our anti-aircraft artillery.

AVIATION. Lieut. Coppens set six hostile balloons on fire, including three on July 22 in less than five minutes. The total number of victories won by this officer in three months is thereby raised to 21.

## ITALIAN.

(July 26, 1918.) Artillery activity occurred on the entire front, being increased in the eastern sector of the ASIAGO Plateau and along the PIAVE from PALANZON to FOSSALTA. During the night after artillery preparation hostile patrols attacked our positions on MONTE CORNO, where they succeeded in penetrating. They were immediately thrown out by our fire. Hostile parties which attempted to approach MONTE KABERLABA and to break our lines on MONTE ASOLONE were repulsed. On the ASOLONE two prisoners were captured by our troops in counter-attack. On the STELVIO one of our patrols met a stronger party of the enemy, which they put to flight.

AVIATION. Hostile machines during the night flew over the RIMINI-PRIMARO zone, dropping four bombs on the latter town, but without causing any casualties.

ALBANIA. Hostile columns which succeeded in crossing the SEMENI at MONTE DI PONTE KUCI were forced back to the river by our counter-attack. Fighting continued yesterday. The enemy having received reinforcements made repeated vigorous attacks but was repulsed each time with heavy losses. We captured about 100 prisoners and some machine guns. A hostile attempt to force a passage over the SEMENI W. of JAGODINA was unsuccessful. In the bend of the DEVOLI on the W. slope of the MALI SILOVES a hostile column which was advancing to attack Hill 760 was repulsed.

## GERMAN.

(July 27, 1918, 1.10 p. m.) WEST FRONT. Army Group of Crown Prince Rupprecht. Fighting activity became more lively at many points during the evening. During the night it was marked on both sides of the SCARPE in connection with unsuccessful raids by British infantry.

Army Group of the German Crown Prince. On the battle front between SOISSONS and RHEIMS fighting activity showed further marked decrease yesterday.

In the CHAMPAGNE local attacks by the French on both sides of PERTHES were repulsed.

Army Group of Duke Albrecht. We made successful raids in the VOSGES and in the SUNDGAU.

(July 27, 1918, 8.32 p. m.) The day was again quiet on the battle front.

## AUSTRIAN.

(July 27, 1918, 8.39 p. m.) On the TYROL Front operations by our assault troops caused the enemy heavy losses in the CONCEI Valley and in the VALLARSA.

ALBANIA. Our troops repulsed several hostile attacks near ARDENICA and forced a crossing over the SEMENI near KALMI. In the region of BERAT fighting activity continues.

SUMMARY OF AIR INFORMATION

CHANGES IN LOCATION OF UNITS

LYS-VIMY REGION.			
292d Reconnaissance Flight..	Pris. stat., R. A. F., July 24 .....	In Argonne-Moselle region, Feb., 1918.	
COMBLES-NOYON REGION.			
5th Protective Flight .....	Document, R. A. F., July 23.....	In Noyon-Rheims region, June 1, 1918.	
47th Pursuit Flight .....	Document, R. A. F., June 26.....	Not previously identified.	
NOYON-RHEIMS REGION.			
27th Pursuit Flight.....	Document, R. A. F., July 10.....	In Flanders region, Apr. 17, 1918.	
NOTE.—This flight has now been identified as belonging to the 3d Pursuit Squadron.			
RHEIMS-ARGONNE REGION.			
1st Bombing Squadron .....	Pris. stat., R. A. F., July 24 .....	In Combles-Noyon region, June 28, 1918.	
(1st, 2d and 3d Bombing Flights.)			
MOSELLE-VOSGES REGION.			
8th Bombing Squadron.....	Mach. down, R. A. F., July 26 ....	Reported in Combles-Noyon region, July 22, 1918.	
(25th, 26th and 27th Bombing Flights.)			
2d Home Defence Flight.....	Pris. stat., R. A. F., June 11 .....	In same region in Feb., 1918.	

NOTE.—According to prisoner's statements, a new bombing squadron the 9th, is now being formed at Paderborn, in Westphalia.

AIRDROMES

ARGONNE-MOSELLE REGION.			
1. New airdromes.	Hangars.	Sheds.	Capacity.
90. Batilly W. ....	+ 4	..	+ 12
Batilly E. and Batilly W. are now to be considered as two airdromes.			
91. Malmy.....	+ 18	..	+ 36
This airdrome is just over the line in Rheims-Argonne region.			
2. Changes in existing airdromes.			
77. Batilly E. ....	—4	..	—12
These hangars are west of Batilly and have been considered part of this airdrome.			
56. Longuyon .....	+ 1	..	+ 4
Increase since July 1, 1918.			
60. Folsweiler .....	..	—7	—42
Photograph shows that previous report was incorrect.			
3. Vacated airdromes.			
82. Rouvrois .....	—6	..	—50
Vacated since June 20, 1918.			
87. Hatriz.....	—7	—1	—30
This resembles an airdrome, but is being used as a dump.			
4. Reported airdromes photographed and found not to exist.			
115. Landres.....	..	..	..
Photograph shows a dump resembling an airdrome.			
147. Vilemontry .....	..	..	..
Probably the Mouzon airdrome that was reported.			
MOSELLE-VOSGES REGION.			
1. New airdromes.			
92. Gros Tenquin .....	..	+ 2	+ 6
93. Bischwald .....	..	+ 3	+ 9
2. Changes in existing airdromes.			
1. Mannheim.....	+ 4	+ 2	+ 58
This is the first information available concerning the accommodation of this airdrome.			
3. Saarbrucken .....	..	—3	—8
These sheds have not been removed, but are being used as dumps.			
5. Mainz .....	..	—17	—64
These sheds, while joining the airdrome, appear to be used in connection with a factory.			
37. Diedersdorf.....	..	+ 2	+ 8
Increase since June 13, 1918.			
3. Reported airdromes requiring confirmation by photograph.			
132. Kreuznach. Reported July 26, 1918.			
138. Vahl Ebersing. Reported July 26, 1918.			
4. Reported airdromes photographed and found not to exist.			
103. Harprich .....	..	..	..
VOSGES-SWITZERLAND REGION.			
1. New airdromes.			
84. Hasingen.....	?	?	?
(Formerly 116.) Accommodation unknown.			
87. Rastatt .....	+ 1	..	+ 50
(Formerly 117.)			
2. Changes in existing airdromes.			
33. Schlestadt.....	+ 1	..	+ 2
Increase since July 15, 1918.			
40. Offenbourg .....	+ 1	..	+ 40
One Zep. hangar.			
88. Altdorf .....	+ 3	..	+ 6



3. *Vacated airdromes.*

84. Hugsweiler .....  
 Vacated since July 1, 1918.

—I

—50

## INTERIOR.

1. *Reported airdromes requiring confirmation by photograph.*

123. Mulheim. Reported July 27, 1918.  
 124. Neusrath. Reported July 27, 1918.  
 133. Coblenz. Reported July 27, 1918.  
 134. Bonn. Reported July 27, 1918.  
 140. Dusseldorf. Reported July 27, 1918.  
 142. Lohausen. Reported July 27, 1918.  
 143. Crefeld. Reported July 27, 1918.  
 144. Gelsenkirchen. Reported July 27, 1918.  
 145. Herne. Reported July 27, 1918.  
 146. Boblingen. Reported July 27, 1918.

These reported airdromes are not considered in computing the number of airdromes in the sectors.

NOTE.—All changes in this list have been included in the hostile airdrome list and map of August 2, 1918.

**DISTRIBUTION OF GERMAN BOMBING SQUADRONS**

FROM SUMMARY OF AIR INTELLIGENCE, R. A. F., JULY 28, 1918

The present distribution of enemy bombing squadrons, from identifications obtained to date is as follows, from north to south:—

3d Bombing Squad .....	Ghent area.....	Gontrode, Mariakerke, Oostacker.
6th Bombing Squad .....	Tournai area .....	Froidmont, Marquain, Templeuve.
7th Bombing Squad .....	Somme area.....	Estrees-en-Chaussee.
4th Bombing Squad .....	Somme area.....	Giizancourt.
2d Bombing Squad .....	Laon area .....	Clermont-les-Fermes, Boncourt.
1st Bombing Squad .....	Sedan area.....	Malmy.
5th Bombing Squad .....	Rethel area.....	Seraincourt.
8th Bav. Bombing Squad .....	Lorraine area .....	Boulay.
501 Giant Flight .....	Ghent area.....	Scheldewindeke.
500 Giant Flight .....	Dinant area .....	Morville.

**GERMAN MACHINE BROUGHT DOWN BY A BRITISH NIGHT-FLYING SCOUT**

FROM SUMMARY OF AIR INTELLIGENCE, R. A. F., JULY 26, 1918

Prisoners from the twin-engine machine, brought down near Robecq on the night of the 24th/25th July, state that their machine belonged to the 9th Bombing Flight. It was attacked by one of our night-flying scouts immediately east of Etaples. The first burst wounded the gunner and set fire to the fabric on the fuselage; this fire was, however, extinguished by diving, but the machine was then again fired at, and one of the engines put out of action. The airplane then flew on for some distance with one engine, when it was again attacked, bullets cutting the petrol pipes to the other engine, which cut out.

The machine was then forced to land in our trenches near Robecq. It was manned by the commander, adjutant and technical officer of the 9th Bombing Flight.

**EQUIPMENT AND DUTIES OF THE 6th BOMBING SQUADRON**

FROM SUMMARY OF AIR INTELLIGENCE, R. A. F., JULY 26, 1918

A prisoner states that the 9th Flight, 6th Bombing Squadron, is equipped with six Friedrichshafen twin-engine machines; the other flights in the squadron are similarly equipped, although the establishment is ten machines.

Bombing is confirmed to have latterly been mainly over the Lillers-Saint-Pol areas, but Etaples and Saint-Omer have lately also been included in orders for this squadron.

**SHORTAGE OF PERSONNEL AND MATERIAL IN THE GERMAN AIR SERVICE**

FROM SUMMARY OF AIR INTELLIGENCE, R. A. F., JULY 29, 1918

The following extract from Order No. 11, of the 20th June, 1918, issued by von Staab's Corps (Soissons front), shows that difficulties are being experienced in the recruiting of officers for the Air Service:

"*Transfers of Officers to the Air Service.* The C. G. S., of the Field Army has issued the following, under date of the 11th June:

"Although the numbers of officers applying for transfer to the Air Service increased rapidly following on my instructions of the 26th June, 1917, a steady decrease of applications for transfer has lately been noticed.

"A continuous flow of officers is an imperative necessity, if the strength prescribed is to be maintained. I, therefore, once more draw the attention of all headquarters, units and officers to my circular of the 26th June, 1917.

"P. S.—The above circular will be strictly adhered to and all applications from officers to transfer to the Air Service will be forwarded through the proper channels to the Army Command, whether recommended or adversely reported on."

The following extract from I. a., No. 7507 op. of the 19th June, issued by the 40th Division (Marne front), is also of interest:

"The increasing difficulties experienced in replacing machines and in the supply of raw materials, as well as in the recruiting of flying personnel, compel us to employ our aircraft economically. In order to effect this, machines will only be sent up on tasks which are of vital importance to the battle. Strict fire discipline will be observed by the artillery when airplanes are carrying out shoots; it will thus be possible to avoid keeping machines in the air for any longer period than is absolutely necessary."

## SUMMARY OF OFFICIAL COMMUNIQUEES

AUGUST 3, 1918.

### AMERICAN.

(August 3, 1918, 9 p. m.) The full fruits of victory in the counter-offensive begun so gloriously by Franco-American troops on July 18 were reaped today when the enemy who met his second great defeat on the MARNE was driven in confusion beyond the line of the VESLE.

The enemy, in spite of suffering the severest losses, has proved incapable of stemming the onslaught of our troops fighting for liberty side by side with French, British and Italian veterans. In the course of the operations, 8,400 prisoners and 133 guns have been captured by our men alone.

### FRENCH.

(August 3, 1918, 11.00 a. m.) During the night our troops continued their advance towards the VESLE. On our left they have reached the AISNE between SOISSONS and VENIZELE.

(August 3, 1918, 9 p. m.) During the day our troops, driving back the enemy's rear guards, have continued their victorious advance along a front of about 50 kilometers in the direction of the VESLE. On our left our line skirts the S. bank of the AISNE and of the VESLE from SOISSONS to FISMES, the outskirts of which are held by the Americans. E. of FISMES we have reached the general line N. of COURVILLE, BRANSCOURT, COURCELLES, CHAMPIGNY. Our cavalry patrols are operating along the railway from SOISSONS to RHEIMS. At some points our advance since yesterday exceeds 10 kilometers. More than 50 villages have been regained during this one day.

### BRITISH.

(August 2, 1918, 7:45 p. m.) Last night our patrols took some prisoners in the LOCRE sector. In the course of a successful raid carried out today E. of DICKEBUSCH Lake we captured prisoners.

Hostile artillery showed some activity N. of BETHUNE.

AVIATION. Yesterday we dropped more than 24 tons of bombs. A large part of these projectiles were dropped from a low altitude on a German airdrome in the course of a raid carried out by two of our squadrons. Six hangars and 16 machines were set on fire and one airplane destroyed on the aviation ground. Eleven German machines were shot down in air fights and three others forced to land disabled. Another was brought down within our lines by anti-aircraft fire and one captive balloon set on fire. Two hostile night bombing machines were brought down over their own airdrome by our pilots. Two of our machines are missing.

During the night and in spite of unfavorable weather ten tons of bombs were dropped on railway lines, stations and airdromes. We again attacked the aviation ground which we had bombed during the day. All our night bombing machines returned.

(August 3, 1918, morning.) A raid attempted by the enemy yesterday morning in the neighborhood of FEUGNY was repulsed with losses. During the night our patrols pushed forward in the ALBERT sector and occupied parts of the enemy's first line. Hostile artillery showed activity at various points between BETHUNE and BAILLEUL.

AVIATION. On August 1-2 on account of the improved weather conditions the activity of the Allied Air Service increased. Very hard fighting occurred with hostile airplanes which attempted to prevent our machines from observing the enemy's retreat to S. of the AISNE. Twenty-two German machines were shot down or disabled; furthermore, six captive balloons were set on fire. During the night of August 1-2, our bombing machines, in spite of the clouds, abundantly shelled the railway stations of ATHIES-SUR-LAON, AMAGNE-LUCQVY and HIRSON; explosions were observed. Altogether 18 tons of projectiles were dropped.

Rain hindered work on August 2 considerably; nevertheless on the battle field our observation planes followed the advances of our troops and carried out reconnaissances to several kilometers behind the enemy's lines. One hostile captive balloon was set on fire.

(August 3, 1918, evening.) The progress made by our patrols in the ALBERT sector continued and the greater part of the ground previously held by the enemy W. of the ANCRE is now in our possession. Our troops followed the enemy closely in his retreat, indications of which are evident. A number of dead were found in his abandoned trenches. Early this morning strong hostile patrols attacked our lines S. E. of HEBUTERNE after a bombardment by artillery and trench mortars. They were completely repulsed. Another hostile patrol was dispersed by the fire of our machine guns this morning E. of ROBECCQ. Hostile artillery showed increased activity in the KEMMEL sector.

AVIATION. During the day of August 2 low-hanging clouds and rain made aircraft work very difficult; nevertheless our planes carried out a large number of reconnaissances and artillery observations each time that the weather permitted. During the day 13 tons of bombs were dropped, of which there were on docks at BRUGES. A very small number of enemy planes appeared. Two of them were brought down and a hostile balloon was set on fire. All our machines returned. No flying was possible during the night.

### ITALIAN.

(August 3, 1918, morning.) Patrol encounters occurred along the STELVIO. Hostile harassing fire was more frequent in VALLARSA and in VAL D'ASSA and was accompanied by bursts of machine gun fire along the lower PIAVE. Many air fights occurred and six hostile machines were shot down.

ALBANIA. The enemy's pressure against our right was checked by the action of our cavalry S. of KUCI. It was increased along the upper SEMENI. Our troops, holding their positions along the lower course of the river, rectified their center and right along the line SINJA-BERAT-CAFA DARZ.

About 30 prisoners were captured in the course of local combats.

A hostile hydroplane was shot down by an aviator of the Royal Navy.

(August 3, 1918, 4.45 p. m.) The enemy's combat activity yesterday was very moderate. Our own and allied artillery carried out effective barrage fire on the enemy's lines of communications on the ASIAGO PLATEAU. Our patrols carried out their usual harassing operations.

### BELGIAN.

(August 2, 1918, evening.) Artillery of both sides was active in the regions of DIXMUDE, MERCKEM and BOESINGHE. At DIXMUDE and W. of LANGEMARCK there was hand grenade fighting.

AVIATION. A German airplane was shot down within our lines and the aviator taken prisoner.

### GERMAN.

(August 3, 1918, 12.20 p. m.) WESTERN FRONT. Army Group of Crown Prince Rupprecht. A heavy local attack by the British S. W. of YPRES yesterday was repulsed. Fighting activity otherwise was limited to reconnaissances and intermittently increasing artillery fire.

Army Group of the German Crown Prince. The great successes attained by the army of General von Boehn in the battle of August 1 contributed to the successful completion of the movements carried out yesterday. The enemy's artillery fire lay on our former combat area until early morning and at some points even until 11.00 a. m. His infantry and

cavalry detachments followed our slowly retiring outposts with hesitation and caution. We inflicted considerable losses on the enemy in local fighting.

In the course of successful combats N. W. of SOUAIN, in CHAMPAGNE, we took about 100 prisoners.

AVIATION. Lieut. Udet achieved his 41st, 42d and 43d, Lieut. von Richthofen his 31st and 32d, and Vizefeldwebel Thom his 26th air victory.

(August 3, 1918, 8.31 p. m.) There is no fighting activity to report.

AUSTRIAN.

(August 3, 1918, 12.25 p. m.) The increased fighting activity along the VENETIAN mountain front is continuing.

AVIATION. On July 31 one of our most successful pursuit aviators, Lieut. Frank Linke-Crawford, died a hero in the course of an air fight.

ALBANIA. We have also gained new territory on both sides of the Upper DEVOLI.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### FLANDERS REGION.

24th Protective Flight ..... Document, French source, July 10 ..... In Lys-Vimy region, June 30, 1918.

### LYS-VIMY REGION.

28th Pursuit Flight ..... Pris. stat., R. A. F., Aug. 1 ..... In Flanders region, June 22, 1918.  
51st Pursuit Flight ..... Mach. down, R. A. F., Aug. 1 ..... In Flanders region, May 14, 1918.  
6th Reconnaissance Flight.... Doc., French source, July 7..... In Vimy-Combles region, June 6, 1918.

### VIMY-COMBLES REGION.

208th Reconnaissance Flight Document, R. A. F., May 15..... In Combles-Noyon region, Apr. 10, 1918.

### COMBLES-NOYON REGION.

231st Reconnaissance Flight . Pris. stat., R. A. F., June 14..... In Lys-Vimy region, May 21, 1918.

### NOYON-RHEIMS REGION.

1st Protective Flight ..... Pris. stat., R. A. F., July 29 ..... In Rheims-Argonne region, May 27, 1918.  
8th Protective Flight ..... Pris. stat., French, July 24..... In Combles-Noyon region, June 10, 1918.  
10th Protective Flight ..... Pris. stat., French, July 28..... In Lys-Vimy region, April 30, 1918.  
14th Protective Flight ..... Pris. stat., French, July 28..... In Lys-Vimy region, April 26, 1918.  
21st Protective Flight ..... Pris. stat., French, July 28..... In Flanders region, May 1, 1918.  
37th Protective Flight ..... Document, R. A. F., June 1..... In Combles-Noyon region, May, 1918.  
31st Pursuit Flight ..... Document, R. A. F., July 2 ..... In Italy, Dec., 1917.

NOTE.—This flight was known to have been transferred to the Western Front about April 1, 1918.

94th Reconnaissance Flight .. Pris. stat., R. A. F., July 26 ..... In Rheims-Argonne region, June, 1917.

NOTE.—It was reported that this flight no longer existed; may possibly be a new formation with the old number.

206th Reconnaissance Flight . Document, R. A. F., July 6..... In Combles-Noyon region, May 3, 1918.  
227th Reconnaissance Flight . Doc., French source, July 24 ..... In Combles-Noyon region, June 23, 1918.  
240th Reconnaissance Flight . Document, R. A. F., July 21..... In Flanders region, June 16, 1918.  
252d Reconnaissance Flight.. Pris. stat., French, July 28..... In Rheims-Argonne region, May 22, 1918.  
257th Reconnaissance Flight Pris. stat., R. A. F., July, 1918..... In Argonne-Moselle region, Jan. 23.

### RHEIMS-ARGONNE REGION.

18th Protective Flight ..... Document, R. A. F., July 16..... In Vimy-Combles region, May 15, 1918.  
23d Protective Flight..... Document, French, July 7..... In Noyon-Rheims region, June 23, 1918.  
30th Protective Flight ..... Document, French, July 15..... In Noyon-Rheims region, June 26, 1918.  
58th Pursuit Flight ..... Document, R. A. F., July 15..... Not previously identified.

NOTE.—Another document shows that this flight was at Coucou, in the Menin area, on May 26, 1918.

60th Pursuit Flight ..... Document, R. A. F., June 17 ..... In Noyon-Rheims region, June 15, 1918.  
205th Reconnaissance Flight . Doc., French, July 7..... In Lys-Vimy region, April 9, 1918.  
251st Reconnaissance Flight Document, R. A. F., July 15 ..... In Combles-Noyon region, June 25, 1918.  
290th Reconnaissance Flight . Document, R. A. F., July 15..... In Combles-Noyon region, Mar. 23, 1918.

### ARGONNE-MOSELLE REGION.

68th Pursuit Flight ..... French source, Aug. 6 ..... In Combles-Noyon region, June 6, 1918.  
44th Reconnaissance Flight .. Doc., French, July 10..... In Noyon-Rheims region, June 2, 1918.  
264th Reconnaissance Flight Doc., R. A. F., July 18..... In Noyon-Rheims region, May 31, 1918.  
279th Reconnaissance Flight Doc., French, June 15 ..... At Buxieres (same region), March, 1918.

### MOSELLE-VOSGES REGION.

1st Home Defence Flight..... Document, French, June 21, 1918..... At Mannheim, April 22, 1918.

### EXTERIOR FRONTS.

45th Reconnaissance Flight .. Document, French, June 18 ..... In Vimy-Combles region, Feb. 16, 1918.  
71st Reconnaissance Flight .. Document, French, June 18 ..... Moselle-Vosges region, Feb. 1, 1918.  
72d Reconnaissance Flight.... Document, French, June 18 ..... On Western Front, unlocated, Dec., 1917.

### UNLOCATED, WESTERN FRONT.

65th Pursuit Flight ..... French source..... In Argonne-Moselle region, May 27, 1918.

NOTE.—This flight was replaced by the 68th Pursuit Flight.

91st Pursuit Flight ..... Document, R. A. F., July 9..... Not previously identified.

## SUMMARY OF OFFICIAL COMMUNIQUÉS

AUGUST 10, 1918.

### AMERICAN.

(August 10, 1918, 9 p. m.) There is nothing of importance to report from the sectors occupied by our troops.

### FRENCH.

(August 10, 1918, 11 a. m.) Our troops, on the right of the British forces, continued to advance successfully yesterday evening and during the night. We have advanced E. of ARVILLERS and taken DAVENESCOURT. In the attack S. of MONTDIDIER, between AYENCOURT and LE FRETOY, we have taken RUBESCOURT and ASSAINVILLERS and have reached FAVEROLLES.

(August 10, 1918, 9 p. m.) On the battle front of the AVRE our attacks were continued throughout the day with increasing success. This morning MONTDIDIER, outflanked on the E. and N. E., came into our possession. Continuing our victorious advance on the right of the British forces we have carried our lines E. of MONTDIDIER on the front ANDRECHY, LABOISSIERE, FESCAMP. Furthermore, extending our activity still farther to the S. E. we attacked the German position on the right and left of the road from SAINT-JUST-EN-CHAUSSEE to ROYE on a front of more than 20 kilometers. We

have captured ROLLOT, ORVILLERS-SOREL, RESSONS-SUR-MATZ, CONCHY-LES-POTS, LA NEUVILLE-SUR-RESSONS, ELINCOURT, effecting an advance of 10 kilometers at some points.

In three days of fighting the French troops have advanced more than 20 kilometers along the road from AMIENS to ROYE. The number of prisoners which they have taken during the same period exceeds 8,000. Among the enormous mass of materiel abandoned by the enemy we have counted up to the present time 200 guns.

#### BRITISH.

(August 9, 1918, evening, continued.) AVIATION. Yesterday our air service cooperated with the other services on the battle front. Our infantry airplanes reported the line reached by the infantry. Our artillery airplanes reported the positions of the hostile batteries in action, infantry columns and convoys. Other machines supplied ammunition to our advance elements.

Cooperation with the tanks was very close. Our machines furnished information to the crews and attacked the enemy's strong points and other positions with bombs and machine guns. They threw smoke bombs in advance of the tanks in order to hide their approach from the enemy. Our machines in liaison with the cavalry rendered very valuable services. Combat squadrons working at low altitude beyond our first lines attacked the retreating enemy with machine guns and bombs, causing heavy losses to the German columns and convoys, which were obliged to move on crowded roads. Our bombing planes, flying at an altitude of several hundred feet from the ground, attacked trains, railway lines, switches and bridges. We destroyed 18 hostile machines and forced 17 others to land disabled. Five captive balloons were brought down in flames.

Fifty of our machines are missing, the greater part having been disabled by rifle and machine gun fire. One of our night bombing machines is missing.

Yesterday our aviators continued to act in liaison with the infantry, cavalry and tanks on the battle front. The German troops and convoys were again attacked with bombs and machine guns every time a favorable opportunity offered. The SOMME fronts were bombarded night and day.

In other sectors of the British front aerial activity was light, the usual photographic, reconnaissance and observation work, however, being carried out.

(August 10, 1918, evening.) The attack launched yesterday evening in accordance with the Allied plan of operations, by the French 1st Army on the right, S. of MONTDIDIER, was developed by our Allies this morning with complete success. Enveloped from the N. and N. E., the town of MONTDIDIER fell into the hands of the French before midday, together with many prisoners and quantities of material. During the remainder of the day the advance of the French 1st Army has been continued in cooperation with the French Army on its right and right of the British 4th Army. British troops, pressing hard upon the retiring German troops S. of LIHONS, have overcome the enemy's resistance and made substantial progress. The general line reached by the Allied forces now runs from N. to S. LIHONS, FRESNOY-LES-ROYE, LIGNIERES, CONCHY-LES-POTS. The number of prisoners is increasing.

#### GERMAN.

(August 10, 1918, 1.19 p. m.) WESTERN FRONT. Army Group of Crown Prince Rupprecht. The enemy's activity between the YSER and the ANCRE was lively. The enemy made raids and local attacks at many points on this front but was repulsed in front of our lines or in hand to hand fighting.

The British and French launched large reserves yesterday and continued their attacks on the whole battle front between the ANCRE and the AVRE. The enemy was repulsed by our counter-attacks on both sides of the SOMME and astride the FOUCAUCOURT-VILLERS-BRETONNEUX Road, where he suffered heavy losses.

In the middle portion of the battle front the enemy won ground, advancing beyond ROSIERES and HANGEST. Our counter-assaults checked him W. of LIHONS and E. of the line ROSIERES-ARVILLERS. During the night we withdrew the troops fighting along the AVRE and the DOM to our lines in rear, E. of MONTDIDIER.

S. E. of MONTDIDIER a heavy local attack by the French was repulsed in our lines.

Army Group of German Crown Prince. Artillery fighting showed intermittent increase along the AISNE and the VESLE.

(August 10, 1918, 8.32 p. m.) The battle now extends from the ANCRE to the OISE. The enemy's attacks broke down before our battle positions.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### LYS-VIMY REGION.

14th Reconnaissance Flight... Document, R. A. F., May 28 ..... In Flanders region, May 6, 1918.

NOTE.—This flight had probably never left Lys-Vimy region. It was reported at Capelle on May 6, which was probably the town of this name in Lys-Vimy region instead of Flanders.

### VIMY-COMBLES REGION.

52d Pursuit Flight..... Machine down, R. A. F., August 10... In Lys-Vimy region, March 6, 1918.

### COMBLES-NOYON REGION.

1st Pursuit Squadron ..... Report R. A. F., August 8 ..... In Noyon-Rheims region, July 26, 1918.

29th Pursuit Flight..... Report, R. A. F., August 8 ..... In Lys-Vimy region, June 1, 1918.

17th Reconnaissance Flight... Document, R. A. F., August 3 ..... In Vimy-Combles region, June 16, 1918.

### NOYON-RHEIMS REGION.

264th Reconnaissance Flight .. Document, R. A. F., July 18 ..... In same region, May 31, 1918.

NOTE.—The identification of this flight in Argonne-Moselle region on July 18, 1918, was incorrect. Document shows it had not left Noyon-Rheims region.

295th Reconnaissance Flight .. Document, R. A. F., June 25 ..... In Combles-Noyon region, April 10, 1918.

### RHEIMS-ARGONNE REGION.

233d Reconnaissance Flight... Machine down, French, August 10... In Vimy-Combles region, April 7, 1918.

### MOSELLE-VOSGES REGION.

8th Home Defence Flight..... Document, R. A. F., June 3 and 21... In Flanders region, March 23, 1918.

### VOSGES-SWITZERLAND REGION.

6th Home Defence Flight..... Report, R. A. F., August 11 ..... At Boblingen (Wurtemberg), Nov. 22, 1917.

### EXTERIOR FRONTS.

1st Reconnaissance Flight..... Document, French, April 30, 1918 .... In Ukraine.

38th Reconnaissance Flight... Document, R. A. F., July 14, 1918 .... On Balkan front.

## IDENTIFICATIONS

### ARGONNE-MOSELLE REGION.

46th Reconnaissance Flight ... Machine down, French, August 11... At Marimbois. Same place, May 19.

### MOSELLE-VOSGES REGION.

242d Reconnaissance Flight... Machine down, French, August 14... At Frescaty. Same place, May 31.

## AIRDROMES

(Week ending August 17, 1918.)

### ARGONNE-MOSELLE REGION.

1. New airdromes :	Hangars.	Sheds.	Capacity.
91. St. Ail ..... (10 kilometers E. of Conflans.)	+5	...	+15
2. Changes in existing airdromes:			
13. Buxieres ..... Increase since 1-7-18.	+1	...	+2
19. Cosnes ..... Increase since 19-5-18.	+2	...	+2
54. Thonne-le-Pres..... No photograph available to estimate capacity until 9-8-18.	....	...	+28
68. Habay-la-Vieille ..... No change in number of hangars or sheds.	....	...	+33
75. Mouzon N. .... Increase since 15-7-18.	+3	...	+7
3. Reported airdromes requiring confirmation by photograph :			
472. Lixieres (8 kilometers W. of Briey). Reported 16-8-18.			

### MOSELLE-VOSGES REGION.

1. New airdromes :			
98. Hattigny ..... (14 kilometers S. S. W. of Saarburg.) Reported 11-8-18; photographed 12-8-18.	?	?	?
99. Phalsbourg ..... Reported 11-8-18; photographed 12-8-18.	?	?	?
2. Changes in existing airdromes :	Hangars.	Sheds.	Capacity.
6. Buhl..... Increase since 15-7-18.	+3	...	+9
8. Morhange..... The three hangars and one shed which were destroyed in a raid have been replaced since 30-7-18.	+3	+1	+16
12. Lorquin ..... Increase since 20-5-18.	+9	...	+18
17. Thionville ..... These hangars were damaged in an air raid and have been removed since 30-7-18.	—4	...	—4
61. Boulay..... Increase since 12-7-18.	—2	...	—2
66. Mittelbronne ..... Increase since 12-7-18.	+5	...	+10

3. Reported airdromes requiring confirmation by photograph :  
153. Mettenheim (28 kilometers S. W. of Darmstadt). Reported 12-8-18.
4. Reported airdromes photographed and found not to exist :  
453. Fey-Curvey. Several dumps resembling airdromes were located.

## VOSGES-SWITZERLAND REGION.

1. New airdromes :  
94. Diefenbach (formerly 129)..... +2      ...      +3  
97. Bruchsal..... ?      ?      ?  
(20 kilometers N. E. of Karlsruhe.) Airdrome and school occupied.
2. Changes in existing airdromes:  
55. Haguenau ..... +2      ...      +6  
Increase since 20-6-18.  
64. Ostheim ..... +14      ...      +42  
Increase since 6-6-18.  
89. Stolzheim..... +7      ...      +14  
Increase since 20-7-18.

## INTERIOR.

1. New airdrome:  
96. Brand (5 kilometers S. E. of Aachen)..... ?      ?      ?  
Six Fokker biplanes identified here. Probably used for some defence.
2. Reported airdrome requiring confirmation by photograph:  
125. Stockheim (6 kilometers S. E. of Duren). Reported 1-8-18.

## LOCATED AIRDROMES.

Region.	Number.	Hangars.	Sheds.	Capacity.	Reported. airdromes.
Argonne-Moselle.....	37	249	64	848	24
Moselle-Vosges.....	31	193	75	906	15
Vosges-Switzerland.....	30	240	89	1,212	18
Total .....	98	682	228	2,966	57

## NEW GERMAN MACHINE

FROM FRENCH BULLETIN OF AIR INFORMATION, AUGUST 1, 1918

The Siemens-Schuckert machine is at present in service at the front, at least in the 12th, 13th, 15th and 19th Pursuit Flights.

Fuselage : The fuselage is monocoque, stout and short, in perceptibly circular section.

Empennage of tail : The fin resembles that of the Pfalz and is fixed in a similar manner. The rudder resembles that of the Albatros, but is of a less rounded shape.

Tail plane and elevator : Recalling those of the Albatros D.5. The elevator is very large.

Cellule: The upper plane is perceptibly rectangular.

The lower plane is staggered to the rear and slightly less in depth than the upper plane. Its spread is the same as that of the upper plane. Its ends are round. The two upper and lower planes are furnished with balanced ailerons not overhanging.

Between the planes, at their ends, a pair of struts in U-shape, recalling those of the Pfalz. The upper plane is fastened to the fuselage on each side by three struts in N shape. The fastening of the lower plane to the fuselage recalling that of the Pfalz.

Motor: Siemens-Schuckert 11-cylinder rotary motor. It carries a four bladed propeller, supplied at its center with a penetration cone. It is said to climb to 6,000 meters in 14 minutes.

Armament : Two machine guns, firing through the propeller.

## ACTIVITY OF GERMAN AIR FORCES

JULY 24-30, 1918

On the British front unfavorable weather prevailed during the greater part of the week ; the only notable feature was the decrease in bombing activity which can be accounted for by the withdrawal of three bombing squadrons from that front.

During the first part of the week activity of chasse, reconnaissance and bombing machines in the Noyon-Rheims sector was very noticeable ; otherwise, some reconnaissances in the Rheims-Argonne sector around Dormans were the only significant features during the daytime. Night bombing flights displayed unusual activity during the week, especially in the Rheims-Argonne and Argonne-Moselle sectors. On the 25th, Chalons and Vitry-le-François were heavily bombarded ; on the 25th, Epernay, Mardenil, Chalons, Vitry-le-François, Laizerais, Ochey and neighboring villages ; on the 26th, the region of the Suippes and Chalons ; on the 29th, Chalons and a few aerodromes ; on the 30th, the Chalons-Suippes region and the Luneville-Baccarat area.

JULY 31-AUGUST 6, 1918

Apparently fearing an attack on the British front, the enemy's scout activity increased considerably in the Flanders and Lille areas, to prevent observation of his railway movements. Numerous reconnaissances were made over the Arras front to observe possible troop movements, and in the same sector there was a concentrated bombing of billeting areas which might contain troops preparing for an offensive. Weather conditions prevented great activity during the latter part of the week.

In the Noyon-Rheims and Rheims-Argonne sectors, there was some activity of scouts and reconnaissance machines on July 31st and August 1st, followed by four days of insignificant activity from the Combles-Noyon sector to Switzerland, partly due to the poor visibility. On the 6th, activity in the Noyon-Rheims sector became very pronounced, numerous machines flying low and machine-gunning the trenches.

# SUMMARY OF OFFICIAL COMMUNIQUEES

AUGUST 17, 1918

## AMERICAN.

(August 17, 1918, 9 p. m.) In the VOSGES our troops, in the course of a successful local attack, captured the village of FRAPELLE.

Yesterday in LORRAINE one of our aviators shot down a hostile machine.

## FRENCH.

(August 17, 1918, 11 a. m.) In the region W. of ROYE there was great artillery activity during the night. S. of the AVRE we continued our progress in the BOIS DES LOGES and reached the eastern edge. Between the MATZ and the OISE we repulsed two strong hostile attacks on LE MONOLITHE and CARNOY Farm and maintained our positions.

N. W. of RHEIMS a hostile raid upon LA NEUVILLETTE was unsuccessful.

(August 17, 1918, 9 p. m.) During the day our troops continued to fight their way forward N. and S. of the AVRE. We captured the strongly held trenches of the CAMP DE CESAR in the region W. of ROYE. S. of the river we advanced our lines to the edges of BEUVRAIGNES. The number of prisoners captured since yesterday in the fighting N. and S. of the AVRE exceeds 1,000. We have also captured numerous machine guns and a considerable quantity of materiel. Farther S. our infantry captured CANNY-SUR-MATZ. A strong hostile counter-attack on CARNOY Farm was repulsed. In a local operation carried out this morning N. of the AISNE, in the region of AUTRECHES, we captured the enemy's positions on a front of five kilometers to a depth of about 1,500 meters. Two hundred and forty prisoners remained in our hands.

AVIATION. August 16, 12 German machines were shot down or forced disabled. During the night of August 16-17 our bombing forces dropped 15 tons of projectiles in the battle zone, where numerous fires were noted, as well as upon bivouacs, cantonments and railway stations in the region of PONTAVER and BAZANCOURT.

## BRITISH.

(August 16, 1918, evening.) Yesterday evening the enemy, launched a strong counter-attack against our new positions at DAMERY. His troops were everywhere repulsed with great loss, leaving 250 prisoners and a number of machine guns in our hands. Today our advance troops in this locality have pushed forward in co-operation with the French and have made substantial progress in the direction of FRESNOY-LES-ROYE and FRANSART. We have taken a few prisoners. On the remainder of the British front there is nothing to report except artillery activity on both sides in various sectors.

(August 16, 1918, evening. Continued.) AVIATION. Aerial combats were not numerous yesterday. Four hostile machines were shot down by our aviators and two balloons brought down in flames. Five German machines were forced to land disabled. One of ours is missing. During the day our air forces carried out numerous reconnaissances and observation missions in liaison with the artillery. During the last 24 hours we dropped 22 1/4 tons of bombs. Two German airdromes were violently bombarded, as well as several depots and railway junctions. All of our bombing machines have returned.

(August 17, 1918, 9.48 a. m.) Our troops continued their pressure N. of the ROYE road and N. of the ANCRE. They have made progress in these two sectors. Yesterday in the neighborhood of VIEUX-BERQUIN our patrols were in lively combats and new encounters took place during the night. We advanced in this region and took prisoners near MERRIS. The enemy's artillery showed considerable activity near MONT ROUGE and the SCHERPENBERG, as well as in the neighborhood of ZILLEBEKE Lake.

(August 17, 1918, evening.) Our line N. of PROYART was slightly advanced last night, and today progress has been made by our troops on a front of nearly a mile N. of LIHONS. A few prisoners and machine guns were taken by us. During the early part of the night the enemy attacked certain of our posts in the SCHERPENBERG sector and was repulsed after sharp fighting. A raid attempted by him early this morning in the neighborhood of LOCRE was also beaten off, leaving prisoners in our hands.

## GERMAN.

(August 17, 1918, 1.10 p. m.) WESTERN FRONT. Army Group of Crown Prince Rupprecht. Between the YSER and the ANCRE fighting activity increased in some sectors during the night. Renewed hostile attacks near VIEUX-BERQUIN and N. of the ANCRE were repulsed.

Army Group of General von Boehn. On both sides of ROYE the enemy again launched heavy attacks. In the afternoon they extended to the N. as far as S. W. of CHAULNES and to the S. as far as N. W. of LASSIGNY. French and Canadians made repeated attacks here until late in the evening in an attempt to break through our positions. The army of General Hutier completely broke up their attacks. The French, who bore the burden of the fighting, again suffered very heavy losses. Near and S. W. of HALLU concentrations of troops and tanks were taken under our artillery fire. Hostile attacks which were launched here during the evening broke down before our lines. The center of yesterday's fighting was along both sides of the AVRE. At that point very violent artillery preparation which was repeated several times preceded the enemy's massed infantry attacks. Near GOVENCOURT the enemy temporarily gained ground in the direction of ROYE. Our counter-attack from the N. part of the town threw the enemy back again. Part of our advanced battle line on the AMIENS-ROYE road, which at the conclusion of the fighting in the evening remained in the enemy's hands, was retaken during the night. S. of the AVRE repeated French attacks broke down before our battle positions. Our machine guns were especially effective here. Near and S. of BEUVRAIGNES the force of the hostile attack was broken by our artillery fire; infantry fighting resulted at only a few points. We repulsed the enemy. Between the OISE and the AISNE a hostile attack in the early morning S. of NAMPEL was unsuccessful.

AVIATION. Lieutenant Udet achieved his 56th air victory.

Army Group of German Crown Prince. Minor artillery actions occurred. Artillery fighting was temporarily active along the VESLE.

Army Group of Duke Albrecht. In the Sundgau detachments of assault troops, who penetrated into the French trenches N. of LARGITZEN with flame projectors, brought back prisoners.

Our pursuit forces shot down four large British airplanes out of a squadron which bombarded DARMSTADT.

(August 17, 1918, 8.33 p. m.) On both sides of the AVRE repeated attacks by the enemy failed completely. Numerous tanks were destroyed by our fire. Between the OISE and the AISNE early this morning there was heavy outpost fighting. Hostile local attacks were repulsed.



SUMMARY OF AIR INFORMATION

CHANGES IN LOCATION OF UNITS

VIMY-COMBLES REGION.

23rd Pursuit Flight .....	Document, R. A. F., July 4 .....	In Noyon-Rheims region, June, 1918.
32nd Pursuit Flight .....	Document, R. A. F., July 4 .....	In Noyon-Reims region, June 2, 1918.
35th Pursuit Flight .....	Document, R. A. F., July 4 .....	In Combles-Noyon region, May 30, 1918.
217th Reconnaissance Flight .	Document, R. A. F., July 19 .....	In Combles-Noyon region, April, 1918.
234th Reconnaissance Flight	Document, French source, Aug. 19 .....	In Noyon-Rheims R., July 5, 1918.

COMBLES-NOYON REGION.

14th Reconnaissance Flight ..	Document, French source, Aug. 6 .....	In Lys-Vimy Region, May 28, 1918.
39th Reconnaissance Flight ..	Document, French source, June 26 .....	In Noyon-Rheims R., May 31, 1918.
264th Reconnaissance Flight .	French source, Aug. 20 .....	In Noyon-Rheims R., July 18, 1918.
500th Giant Flight (Etreux section) .....	Document, R. A. F., July 27 .....	Not previously identified.

Recent photographs show that there is accommodation for 2 Giant airplanes at Etreux, where this section is located. Remainder of flight believed to still be in Dinanr area.

NOYON-RHEIMS REGION.

17th Reconnaissance Flight ..	Document, French source, Aug. 18 .....	In Combles-Noyon R., Aug. 5, 1918.
249th Reconnaissance Flight .	French source, Aug. 14 .....	In Combles-Noyon R., June 3, 1918.
262nd Reconnaissance Flight	Document, French source, Aug. 19 .....	In Combles-Noyon R., June 12, 1918.

RHEIMS-ARGONNE REGION.

235th Reconnaissance Flight .	Document, R. A. F., July 9 .....	In Combles-Noyon Region, June 12, 1918.
239th Reconnaissance Flight	Document, R. A. F., July 9 .....	In Combles-Noyon Region, April 19, 1918.
256th Reconnaissance Flight	Document, R. A. F., end July .....	In Lys-Vimy Region, June 16, 1918.
278th Reconnaissance Flight	Document, R. A. F., July 9 .....	In Combles-Noyon Region, June, 1918.

MOSELLE-VOSGES REGION.

80th Pursuit Flight .....	French source, Aug. 14 .....	In Noyon-Rheims, June 1, 1918.
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(This flight is located at Bensdorf airdrome, No. 45.)

EXTERIOR FRONTS.

246th Reconnaissance Flight .	Document, R. A. F., 25 .....	On Salonika front.
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Identification in Vimy-Combles region, April 26, 1918, probably incorrect, as this flight in the Balkans previous to that time.

IDENTIFICATIONS

ARGONNE-MOSELLE REGION.

46th Reconnaissance Flight ..	Mach. down, French, Aug. 16 .....	At Briey airdrome, No. 1.
At Marimbois, same region, up to June 10.		
298th Reconnaissance Flight	French source, Aug. 16 .....	At Chambley. At Buxieres, same region May 19, 1918.

MOSELLE-VOSGES REGION.

70th Pursuit Flight .....	Document, French source, Aug. 12 .....	At Buhl. Identified same place, May 3 1918.
3rd Home Defence Flight ....	French source, Aug. 18 .....	At Morhange. Identified same place, May 14th.

VOSGES-SWITZERLAND REGION.

289th Reconnaissance Flight .	Mach. down, French, Aug. 23 .....	At Habsheim. Identified same place, July 2, 1918.
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AIRDROMES

ARGONNE-MOSELLE REGION.

1. <i>New airdromes.</i>		Hangars.	Sheds.	Capacity.
102.	Lixieres .....	+6	..	+12
103.	Autrecourt .....	..	+9	+80
105.	Bulson .....	+8	..	+12
2. <i>Changes in accommodation of existing airdromes.</i>				
85.	Giraumont .....	+4	..	+12
	Increase since July 19, 1918.			
53.	Joppecourt .....	..	..	+9
	No change in hangars or sheds.			
29.	Anoux .....	+3	..	+3
	Increase since May 16, 1918.			
	Increase since August 8, 1918.	+3	0	+9
3. <i>Reported airdrome requiring confirmation by photograph.</i>				
154.	Sommauthe .....	6 hangars reported, August. 21, 18.		
4. <i>Reported airdromes photographed and found not to exist.</i>				
103.	Luxembourg.	465.	Fosse.	
111.	Bettembourg.	466.	Bantheville.	
459.	Lachaussen.	468.	Belval.	
463.	Damvillers.	469.	Bois-des-Loges.	
464.	Remil-sur-Meuse.	470.	Aincreville.	

## MOSELLE-VOSGES REGION.

1. *New airdromes.*

	Hangars.	Sheds.	Capacity.
100. Chemery .....	+3	..	+3
101. Bisping .....	+3	..	+9
104. Nitting .....	+2	..	+4
Increase since August 14, 1918. Drainage system under construction.			
107. Bitche .....	+4	+1	+20
106. Kirchberg .....	+1	+1	+5

2. *Changes in accommodation of existing airdromes.*

1. Mannheim .....	..	+1	+20
No photo available to estimate capacity until August 29, 1918.			
6. Buhl .....	+1	..	+2
Increase since August 16, 1918. This is the first of a new line of hangars under construction on the west side of the airdrome.			
12. Lorquin .....	+2	..	+4
Increase since August. 11, 1918.			
48. Kuttingen .....	+1	—2	—2
Decrease since May 30, 1918.			
60. Folpsweiler .....	..	—1	+34
Small hangars have been removed and large ones constructed.			
78. Vatimont .....	+3	..	+3
Increase since June 27, 1918. New active.			
98. Hattigny .....	+10	..	+20
Increase since August. 11, 1918.			
99. Phalsbourg .....	+5	..	+15
Increase since August 11, 1918.			

3. *Reported airdromes requiring confirmation by photograph.*

151. Guebling .....	5 hangars reported August 21, 1918.		
152. Mittersheim .....	Reported August 21 1918.		

4. *Reported airdromes photographed and found not to exist.*

451. Retonfey.	458. Pange.
454. Genesdorf.	460. Boulay N. W.

## VOSGES-SWITZERLAND REGION.

1. *Changes in accommodation of existing airdromes.*

	Hangars.	Sheds.	Capacity.
74. Niedernal .....	+6	..	+27
Increase since June 25, 1918.			
84. Hasingue .....	+8	..	+16
This is the first information available concerning the accommodation of this airdrome.			
94. Diefenbach .....	+7	..	+15
Increase since July 31, 1918. Construction appears to be completed.			

2. *Reported airdromes photographed and found not to exist.*

450. Erstein.	457. Zellweiler.
452. Duttlenheim.	462. Kandern.
456. Lutterbach.	471. Dambach.

## INTERIOR.

125. Stockheim .....	Deos not exist.
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## AIRDROMES — OTHER SECTORS

(August 15 to 21, inclusive.)

Region.	Added.		Removed.	
	Sheds.	Hangars.	Sheds.	Hangars.
Flanders .....	1	0	2	0
Lys-Vimy .....	11	0	0	11
Vimy-Combles .....	1	3	2	5
Combles-Noyon .....	25	122	13	296

LOCATION, PERSONNEL, EQUIPMENT, AND DUTIES OF  
THE 46TH BAVARIAN RECONNAISSANCE FLIGHT

(TRANSLATION FROM I. S., 8TH FRENCH ARMY, 19-8-18.)

A prisoner of this unit brought down at Bouxieres-aux-Dames on August 16th 1918, gives the following information concerning the flight :

LOCATION.—This flight was stationed at the Marimbois airdrome No. 14, up to the 10th of June, 1918. It was then sent to the Briey airdrome No. 16. The site of the latter airdrome is that of a former French flying ground adapted to meet requirements. It is said to comprise 5 hangars.

PERSONNEL.—Prior to the loss of a machine which was brought down in our lines on the 14th inst., the flight consisted of 4 officers observers and 4 N. C. O. corporals). Additional to the above are the O. C. Flight, the officer), a photographic and an administrative officer. All the personnel is lodged at Briey.

EQUIPMENT.—Formerly the flight worked as a Corps flight and was equipped with D. F. W., L. V. G., and Hanoveraners. Since its transfer from Marimbois to Briey, the 46th Bavarian Reconnaissance Flight having become an army flight (Army C) has been given Rumplers with a 260 H. P. engine. The pilot has a high opinion of the Rumpler which he describes as very fast and easy to handle (speed 140 to 150 kilometers at 3,000 meters. Ceiling 6,000 meters). The pilot states that it is very easy to land and to maneuver.

DUTIES.—The 46th Bavarian Reconnaissance Squadron, formerly employed for reconnaissance work, photography, and artillery registration, is at present used solely for long distance reconnaissance work. Its zone of action lies between Nancy and St. Dizier as far as Neufchateau. Flights are undertaken by day only and by single machines, one, as a general rule, in the morning and one in the evening.

ENEMY'S INTENTIONS.—The prisoner knows of nothing to indicate any forth-coming modification in the enemy's attitude. All he reports is the presence of an Austrian storm detachment at Briey.

**FORMATION OF DAY-LIGHT BOMBING SQUADRONS**

(FROM BRITISH SUMMARY OF AIR INTELLIGENCE, AUGUST 16, 1918).

A prisoner of No. 8 Bombing Squadron (Moselle-Vosges) states that a day bombing squadron is being formed at Boulay. The machines will be Friedrichshafen (C type).

NOTE.—A prisoner captured on this front stated that it had been intended to use Gotha twin-engine two-seater machines on the British front for daylight bombing. He understood, however, that the proposal had been dropped, and that they would now be employed for long-distance reconnaissance work.

**NEW BOMBING SQUADRON**

(FROM BRITISH SUMMARY OF AIR INTELLIGENCE, AUGUST 21, 1918).

Prisoners captured by the French confirm that a 9th Bombing Squadron is being formed. They state that the squadron is to be a Bavarian Unit.

NOTE.—The formation of this squadron was first reported July 28, 1918 and was published in the *U. S. Summary of Air Information*, August 4, 1918.

**EXPERIMENTAL BOMBING STATION**

(FROM BRITISH SUMMARY OF AIR INTELLIGENCE, AUGUST 21, 1918).

According to reliable reports, there is a Bombing Experimental Station (Bomben versuchs Kommande) at Havay, south of Mons. The village of Havay, from which the population has been evacuated, is used as a target.

Previous reports are now confirmed; a recent photograph also shows an airdrome, with accommodation for twin-engine machines, near this village.

**DELAYED FUSE FOR AVIATION BOMBS**

An unexploded bomb of 55 kilograms with a fuse of this type was recently found in the Chalons region. The duration of the delay is about 10 seconds. This bomb is equipped with two safety devices; a point of the nose which upon being loosened allows the firing pin to act in case of a slight jar, and a key through the percussion cap near the base of the nose, which if withdrawn, gives the firing pin access to the percussion cap.

**THE EMPLOYMENT OF THE AVIATION IN A GERMAN ARMY CORPS**

TRANSLATION OF A GERMAN DOCUMENT: FROM FRENCH IID ARMY BULLETIN, AUG. 14, 1918  
(PRINTED IN U. S. SUMMARY OF INFORMATION, AUGUST 18, 1918).

54TH ARMY CORPS.

3D AND 2D SECTIONS/AVIATION/ARTILLERY.

HEADQUARTERS, MAY 13, 1918.

**I. AVIATION AT THE DISPOSAL OF THE ARMY CORPS**

Corps aviation commander: Chief of Flight Group 13.

Aviation at the immediate disposal of the Army: Reconnaissance flights 202 and 227.

Corps.

Flights at the disposal of

{	Field Depot at Chauny.	Battle flights 1, 8, 10, 14, and 21.
	Field Depot at Oberwald.	Reconnaissance flight 222.
	21st Division.	Reconnaissance flight 285.
	22d Division.	Reconnaissance flight (?).

**II. MISSIONS OF THE FLIGHT UNDER ORDERS OF THE ARMY CORPS**

(a) Reconnaissance flight 202: Long-distance reconnaissances.

(b) Reconnaissance flight 227: Direction of the fire of the artillery group for long-range combats.

(c) The battle flights will support the infantry attack and harass with machine-gun fire and bombs the artillery and also the reserves brought up to the front and in the departure positions, columns on the march, and convoys.

The army aviation units have the following intelligence missions:

Army reconnaissance flights (Fliegerabteilungen): Long-range reconnaissances on a large scale (observation of railway lines and roads), regulation of long-range guns.

Combat flights (Jadstreitkrafte): Fighting for the supremacy of the air within the enemy's lines.

Bombing flights (Bombengeschwader): Attack during the night with bombs and machine guns of hostile cantonments, headquarters, railway stations, ammunition depots, airdromes, convoys on the roads. Verification during the night of the general outline of our first lines by several individual airplanes (night infantry airplanes, Nachtfl).

**III. MISSIONS OF THE FLIGHTS UNDER THE ORDERS OF INFANTRY DIVISIONS**

All the missions of the division which fall upon the artillery and infantry airplanes.

Artillery airplanes. They will verify the precision of our fire, determine the areas which receive but little bombardment, report the enemy's batteries and battery nests, assemblies of troops and columns on the march which are not taken under our fire; they will direct our fire by dropping ballasted messages or by radio. If it is possible, they will also observe our own fire.

Infantry airplanes (recognizable by flames painted on both wings). The mission of the infantry airplanes does not begin until some time after the attack. They reconnoiter and observe the advance of the infantry. They make known by luminous signals, wireless telegraphy or dropped messages the hindrances to the advance, the hostile points of support not yet immobilized, hostile counter-attacks in preparation and the approach of tanks.

IV. ENGAGEMENT OF AVIATION UNITS

(a) Flights at the disposition of the Army Corps. The commander of Flight Group 13 will regulate the carrying out of long-distance reconnaissances. The commander of the group of long-range combat artillery will supervise the regulation by airplane of the fire of his group.

The engagement of the battle flights will only take place according to the instructions of the corps aviation commander. The divisions will inform the corps in good time of their needs in the matter of support for their infantry attack.

(b) Flights at the disposition of the infantry divisions. The relief of the artillery airplane will be carried out in such a manner that on the day of the attack there will always be an airplane crossing the zone of combat of the infantry division before, during, and after the attack.

The infantry airplanes will sketch the position of the first line upon order of the infantry division or after the troops have reached certain lines of the terrain.

On the day of the attack, reconnaissance flights of the infantry division will start out from the auxiliary landing field. No airplane may land on these fields during the days preceding the attack unless forced to do so.

The flight commander must be present at the auxiliary landing field unless reasons of a technical nature oblige him to be present at the airdrome. The aviation liaison officer will be at the infantry P. C. and must be constantly kept informed by the division of the progress of events.

V. POINTS WHERE MESSAGES WILL BE DROPPED

Positions for the reception of dropped messages will be organized near all P. C's. The following signals of white cloth will be used to indicate the P. C's....

VI. LUMINOUS SIGNALS

The luminous signals sent up by the infantry after the rolling barrage has ceased in order to direct the artillery fire or to request its support must be repeated by the airplanes. The latter will signal the approach of tanks by dropping luminous parachute bombs. They will request the infantry to make known its first line by means of white star rockets.

VII. WAVE LENGTHS

Wave lengths of of all infantry divisions for the infantry airplanes .....	200 meters
" of all odd infantry divisions for artillery airplanes.....	150 "
" for all even infantry divisions for artillery airplanes.....	250 "
" for the long-distance combat airplanes.....	300 and 350 "

More detailed orders will be issued.

VIII. AERIALS

The officers in charge of the aerials will always be officers and not non-commissioned officers performing the duties of officers. The officers in charge of the aerials must be very experienced and familiar with the methods of fire, in order to be able to direct it if necessary. They must be carefully instructed in all that concerns the projected development of the battle and must only have charge of the aerial. They are authorized to have the surveillance batteries open fire by reporting to the group commander.

In case the surveillance battery is engaged in executing fire upon an objective reported by airplane and another objective to be taken under surveillance appears, the officer in charge of the aerial must take the necessary steps to have another battery immediately brought into action.

The personnel of the aerials will be reinforced by artillerymen whose duty will be to display the panel signals. This personnel will be trained in advance ; runners and mounted orderlies will be stationed with the aerials ; the fields where the ballasted messages are to be dropped will be indicated by panels.

IX. THE DIVISIONAL FLIGHTS

(Div. Fliegerabteilungen).

The flights assigned to the attack divisions will take part in their maneuver behind the front.

X. INSTRUCTION OF THE INFANTRY IN LIAISON SERVICE WITH THE INFANTRY AIRPLANES

The importance of the services of the infantry airplane, which are quite considerable in open warfare, are not yet sufficiently appreciated by the troops. All officers will bring this matter to the attention of their men. It is necessary that even during training the discipline, as concerns the infantry-airplane service, be very strict. On the request (white star rocket) of the infantry airplane, the first line alone, and not an assault wave in the rear, will indicate its position by firing white rockets or displaying panels or by lighting four to six Bengal lights simultaneously at the same point.

The infantry will be abundantly provided with white rockets ; the supply will be assured. The least possible number of signal panels will be used, as they are easily forgotten and left upon the ground at the time of the attack and errors result. It is of advantage to sew the panels upon shelter halves.

The P. C's. of the battalions and regiments engaged will display their panels in the manner indicated in the cipher code.

The method of attracting the attention of the aviator to the P. C. by means of visual signals has given excellent results.

XI. The organization of airdromes and the instruction of newly arrived aviators will be regulated by the corps aviation commander.

XII. The officer in charge of the cinematographic service will prepare for the attacking troops an exhibition of photographic views of the ground over which they are to operate. The date has not yet been fixed.

XIII. The principal mission of the aerial reconnaissances is, until further orders, to observe whether the enemy has perceived our preparations for attack and if he is taking measures to meet them.

The General Commanding the Army Corps:

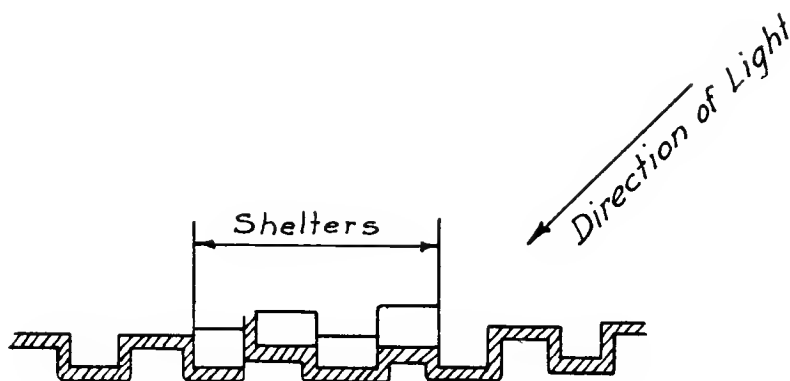
(Signed) VON LARISCH.

#### NEW TYPES OF CAMOUFLAGED SHELTERS

Air photographs taken during the month of July on the British front show several new types of camouflaged shelters. The long framework huts described in the Summary of Information of the 14-7-18 have become even more irregular in shape but are easily identified while under construction.

The most successful form of camouflage is shown in the case of square shelters built into trenches so as to look like traverses.

NOTE.—See following print.



# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION [OF UNITS

### VIMY-COMBLES REGION.

24th Reconnaissance Flight ..	Document, R. A. F., Aug. 19 .....	In Noyon-Rheims Reg., July 5th.
293rd Reconnaissance Flight ..	Document, R. A. F., Aug. 2 .....	In Combles-Noyon, April 23rd.

### COMBLES-NOYON REGION.

217th Reconnaissance Flight ..	Pris. Stat., R. A. F., Aug. 23 .....	In Vimy-Combles Reg., July 19th.
224th Reconnaissance Flight ..	Pris. Stat., R. A. F., Aug. 23 .....	In Lys-Vimy Reg., April 11th.
3rd Protective Flight .....	Pris. Stat., R. A. F., Aug. 23 .....	In Noyon-Rheims Reg., June, 1918.

NOTE.—The 2nd Battle Flight Group (3rd, 13th, 19th and 29th Protective Flights) cooperated in the enemy attack east of Rheims on July 15th, and was transferred to the Lille area on July 22nd. On the 8th, 9th and 10th of August, flights from this group flew to the Somme battle front, flights returning to Lille on completion of their work. On August 21st, the group moved to Longavesnes airdrome.

### RHEIMS-ARGONNE REGION.

52nd Protective Flight .....	Pris. Stat., R. A. F., July 31 .....	Not previously identified.
21st Pursuit Flight .....	Document, R. A. F., July 28th .....	In Noyon-Rheims Reg., June 14th.
31st Pursuit Flight .....	Document, R. A. F., July 28th .....	In Noyon-Rheims Reg., July 2nd.

### ARGONNE-MOSELLE REGION.

67th Pursuit Flight .....	Mach. down, French source, Aug. 20 .....	With 5th German Army, Not. previously identified.
31st Reconnaissance Flight ..	Pris. Stat., French source, Aug. 1918 .....	At Marimbois. On Western front, unlocated, Mar. 11, 1918.
37th Reconnaissance Flight ..	French source, Aug. 23 .....	At Thiaucourt. Not previously identified on Western front.
257th Reconnaissance Flight ..	Pris. Stat., R. A. F., Aug. 1918 .....	Verdun area. In Noyon-Rheims region, July, 1918.
Mosaic Section of Army Detachment C .....	French source, Aug., 1918 .....	At Briey. Identified at Mars-la-Tour, same region, May 19.

NOTE.—This section is reported to be attached to the 46th Reconnaissance Flight.

### MOSELLE-VOSGES REGION.

18th Pursuit Flight .....	French source, Aug. 23 .....	At Montey. In Lys-Vimy Region, June 6.
78th Pursuit Flight .....	Pris. Stat., R. A. F., Aug. 1918 .....	At Buhl. In Noyon-Rheims R., July 1.
18th Reconnaissance Flight ..	Pris. Stat., French source, Aug. 1918 .....	At Montey. In Vimy-Combles Region, June 29, 1918.

### VOSGES-SWITZERLAND REGION.

4th Reconnaissance Flight ...	Pris. Stat., R. A. F., Aug. 1918 .....	At Hagenau. Identified on Western front (unlocated), April 10, 1918.
5th Home Defence Flight ....	Pris. Stat., R. A. F., Aug. 1918 .....	At Neuf-Brisach. Identified at Fribourg, same region, May 4, 1918.

### UNLOCATED.

299th Reconnaissance Flight	Report, R. A. F., Aug. 1918 .....	Last identified at Bendorf, Moselle Vosges Region, May 2nd.
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## IDENTIFICATIONS

### ARGONNE-MOSELLE REGION.

64th Pursuit Flight .....	Document, R. A. F., July 22 .....	At Mars-la-Tour. Identified same place, May 19th.
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### MOSELLE-VOSGES REGION.

80th Pursuit Flight .....	Pris. Stat., R. A. F., Aug. 1918 .....	At Marimont, S. E. of Bendorf. Incorrectly reported at Bendorf, Aug. 14.
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### VOSGES-SWITZERLAND REGION.

71st Pursuit Flight .....	Mach. Down, R. A. F., Aug. 12 .....	At Habsheim. Identified same area, June 8th.
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## AIRDROMES

### ARGONNE-MOSELLE REGION.

#### 1. New Airdromes.

	Hangars.	Change. Sheds.	Capacity.	Present accommodation. Hangars.	Sheds.	Capacity.
58. Lantefontaine .....	+5	..	+10	5	..	10
82. Labry .....	+12	..	+24	12	..	24
109. Carignan .....	+4	..	+8	4	..	8

#### 2. Changes in accommodation of existing airdromes.

9. Mars-la-Tour .....	—2	—3	—16	7	..	14
Destroyed in two raids by French bombing units since 20-8-18.						
10. Puxieux .....	..	+1	+24	2	2	32
May not be a change. Previous photo was indistinct.						
57. Stenay .....	+3	+1	+16	17	1	46
May not be a change. Previous photo did not cover the entire airdrome.						
91. Malmy .....	+5	..	—13	23	..	23
Increase since June 26, 1918. Photo shows that airdrome is made up of T hangars for bombing machines with a capacity of one machine each.						
95. St. Ail .....	+1	..	+3	9	..	7
Increase since August 21, 1918.						

## MOSELLE-VOSGES RÉGION.

1. <i>New airdromes.</i>	<i>Change.</i>			<i>Present Accommodation.</i>		
	Hangars.	Sheds.	Capacity.	Hangars.	Sheds.	Capacity.
108. Dienze..... Auxiliary landing ground.	+1	..	+2	1	..	2
2. <i>Changes in accommodation of existing airdromes.</i>						
12. Lorquin..... Increase since August 14, 1918.	+4	..	+4	19	..	38
61. Boulay..... Increase since August 21, 1918.	+2	..	+2	28	6	48
98. Hattigny..... Increase since August 14, 1918.	+3	..	+6	13	..	26
3. <i>Vacated airdrome.</i>						
86. Friesdorf..... Vacated since July 30, 1918.	—9	..	—9	0	0	0
4. <i>Reported airdrome photographed and found not to exist.</i>						
135. Mannebach.						

## VOSGES-SWITZERLAND REGION.

No changes.

INCREASES IN ENEMY AIRDROMES FROM ARGONNE TO THE SWISS BORDER,  
AUGUST 1st TO AUGUST 31st, 1918

In the Argonne-Moselle sector the enemy has constructed seven new airdromes with 44 hangars and nine sheds, and has added 18 hangars and two sheds to old airdromes, thereby increasing the machine of the capacity sector 237.

In the Moselle-Vosges, nine new airdromes with 32 hangars and four sheds have been constructed, 27 hangars have been added to old airdromes, and one airdrome with nine hangars has been vacated. The machine capacity of the sector has been increased 181.

In the Vosges-Switzerland sector, the enemy has constructed two new airdromes with nine hangars, and has added 37 hangars to old airdromes, thereby increasing the machine capacity of the sector 123.

The largest increases have taken place in the areas of Mouzon, west of Metz, north of Chateau-Salins, Saarebourg, and Schlestadt.

The enemy is probably carrying out his policy of having several times as many airdromes as are actually needed at one time to permit rapid transfer of flights to the region in which they are most needed.

## HISTORY OF THE 80th PURSUIT FLIGHT

(FROM FRENCH VIIth ARMY BULLETIN, AUGUST 21, 1918. PRISONER'S STATEMENT).

The prisoner states that the 80th Pursuit Flight is commanded by Captain Von Falkenhayn, that it is working for the 19th German Army and is located at the Marimont airdrome. The prisoner stated that if the flight consists of 23 to 26 machines, at present, it is because it is in the course of transformation.

MACHINES.—At the beginning of August the flight consisted of 12 machines. Albatros D. V. type, Towards the 5th or 6th inst., it received six Fokker type D. VI., which could not be used because the engine (type Oberursel, rotary) does not give satisfaction. This is due, says X..., to the bad quality of the oil.

The Albatros D. V. were used again. A few days before X... was captured (i. e. from 10th to 12th August) following machines arrived at the airdrome of the Pursuit Flight No. 80: six Fokker D. VII. (stationary engine Mercedes-Daimler, 160 HP.). They proved satisfactory. Under those circumstances, the Albatros D. V. will be sent to the rear, and the flight will consist of 12 machines Fokker type, which the pilots generally prefer to the Albatros. The Fokker D. VI. have undergone some modifications, which make them very good machines.

All machines of the flight have tails painted in alternative black and white stripes, which are the distinctive markings of the flight.

FIELD POST.—Bavarian Pursuit Flight No. 80; Field-post 2.348.

OTHER FLIGHTS.—The 199th Bavarian Reconnaissance Flight is now located at the Bensdorf airdrome. The prisoner knows some pilots belonging to it, among others the N. C. O.'s Hainzinger and Weiss. The 199th Reconnaissance Flight is said to carry out photographic duties and long-distance reconnaissances; the N. C. O. Hainzinger is reported to have flown repeatedly over Epinal. This flight is equipped with machines type D. F. W. L. V. G. or Hannoveran.

The reconnaissance flight 299 is reported to have left Bensdorf.

The 3rd Single-Seater Battle Flight is now stationed at the Morhange airdrome. The 70th and 78th are now stationed at the Buhl airdrome. The 70th Pursuit Flight is commanded by Lt. Schlieter but the prisoner does not know who commands the 78th Pursuit Flight. The Aviation Park of the XIXth German Army is at Sarreguemines.

## HOME DEFENCE FLIGHTS

(FROM BRITISH INDEPENDENT FORCE, SUMMARY OF AIR INFORMATION, AUG. 25, 1918).

The defence of Germany against attacks from the air is entrusted to the Home Defence Units.

KAMPFEINSATZERSTAFFELN.—(Single-seater Fighters Flights).

These flights are under the Military Air Service, and as will be seen from the map (and as would be expected) the Military Service is responsible for the defence of Germany against aerial attacks from the land.

The following is believed to be the distribution of the Home Defence Flights:

1st Mannheim and Sandhofen .....	British No.	1
2nd Saarbruck .....	" "	3
3rd Morhange .....	" "	8
4th Freiburg .....	" "	2
5th Neu Breisach.....	" "	23

6th Boblingen (S. W. of Stuttgart) .....	British No.	146
7th Crefeld .....	" "	143
8th Bitche .....	" "	107
9th Mayence .....	" "	5
14th Lahr .....	" "	41
? Bonn .....	" "	134
? Brand (near Aix-la-Chapelle) .....	" "	96
? Coblenz .....	" "	133
? Cologne .....	" "	123
? Karlsruhe .....	" "	65
? Ober Cassel (near Dusseldorf) .....	" "	140

The following are the details of these units :—

KAMPFEINSITZERSTAFFELN.—These flights were originally stationed in Alsace and Lorraine—i. e., comparatively close to the front. With, however, the extension of the scope of our bombing raids, and the outcry of the German population for a more adequate defence against our attacks, new units were formed and stationed at places further in the interior. Consequently, at the present time the enemy has his home defence units scattered over a wide area and stationed at, or near, those places which he considers most liable to attack.

KAMPFEINSITZERSTAFFELN are each equipped with 12-14 machines of the following types :—

Albatros (D. 3.)  
 " (D. 5.)  
 " (D. 5a.)  
 Fokker triplanes.  
 Pfalz (D. 3a.)

There is every indication of an increase in either of these flights or in the establishment of existing ones. It is also apparent that they are now being equipped with the latest types of fighting machines.

It should be remembered that on the Alsace, Lorraine, and Verdun Fronts, the Pursuit Flights (Jagdstaffeln) assist the Home Defence Flights in their task, as well as carrying out their own duties at the front.

#### ATTACK ON ENEMY AERODROMES

A prisoner captured by the French states that a favourable opportunity to attack hostile aerodromes is at 12 mid-day, when all the officers are at mess, and no one is on the aerodrome. The same state of things occurs at 9 p. m.

#### SUPPLY OF PERSONNEL

It appears that the supply of officer personnel for Stenay Aerodrome, comes from the Training Depot at Darmstadt.

Squadrons often stay at Stenay from ten days to a fortnight, and then leave.

#### CAPTURED GERMAN ORDER

(FROM BRITISH SUMMARY OF AIR INTELLIGENCE, AUGUST 23, 1918).

Secret.  
 LI Corps,  
 Ia. No. 922.

Corps H. Q.,  
 28-4-18.

#### CORPS ORDER.

3. The Army Commander issues the following order:—

The task of infantry and artillery aeroplanes in locating our foremost trenches has often been rendered difficult during the last few days, owing to the fact that our infantry was wearing French blue greatcoats. The wearing of conspicuous articles of enemy clothing by troops in the front line is, under all circumstances, to be prohibited. Such action may lead to disastrous mistakes."

#### STRENGTH OF PURSUIT FLIGHTS

(FROM BRITISH SUMMARY OF AIR INTELLIGENCE, AUG. 24, 1918).

From the statements of prisoners captured during the last three months, it appears that the strength of the German pursuit flight is much below establishment (18 machines).

The strength of pursuit flights has for a long time been only some 15 machines, on an average, but latterly this number has still further decreased, and the strength of these units will in future be taken at 12 machines only.

The inadequate supply of machines and, especially, of pilots, due to heavy casualties and to the formation of a large number of new units during the last winter, is responsible for the reduced strength of pursuit flights.

#### ENEMY POLICY

(FROM BRITISH SUMMARY OF AIR INTELLIGENCE, AUGUST 29, 1918).

Captured orders, issued by the LIV German Corps on the 13th May for the co-operation of aircraft in the attack on the Aisne front on the 27th May, contain the following points of interest :

The Corps had five reconnaissance flights at its disposal. Two of these were directly under the orders of the Corps Aviation Commander, one flight being responsible for long-distance reconnaissance, the other for co-operation with long-range (artillery) group. The other three flights were allotted to divisions.

A battle flight group consisting of five flights was also directly under the Corps Aviation Commander, who employed the flights in accordance with the demands put forward by divisions.



The duties of battle flights consisted exclusively in the attacking of ground targets with machine guns, grenades and small bombs.

The chief object of reconnaissances at that time (i. e., a fortnight before the attack) was to ascertain whether the German preparations for attack had been noticed and whether any measures were being taken.

Two-seater machines belonging to night bombing squadrons were to be given the task of locating the front line by night.

#### GERMAN ANTI-AIRCRAFT DEFENCE

(PUBLISHED IN SUMMARY OF INFORMATION, AUGUST 31ST, 1918).

TRANSLATION OF A GERMAN DOCUMENT: FROM FRENCH 1ST ARMY BULLETIN, AUGUST 25, 1918.

*Resume of a memorandum from the IIIrd Army Corps (No. 164, July 17, 1918). Relating to anti-aircraft defence.*

The memorandum begins with this admission:

"It is evident that during our offensives we have suffered extremely heavy losses from the enemy's aviators. To avoid these losses in the future, and to accustom the men henceforth to employ effective measures for anti-aircraft defence, it is necessary during periods of quiet to take measures destined to increase the safety of the troops." During the course of the fighting, units available for anti-aircraft defence, even those operating in conjunction with aviation units, will, in spite of their undeniable usefulness, be unable to protect the troops absolutely, especially in rear. In quiet sectors, this protection is naturally even more uncertain. It is, therefore, necessary even during a period of quiet, that the resting troops protect themselves with machine gun fire against low-flying airplanes.

#### ORGANIZATION OF ANTI-AIRCRAFT DEFENCE DURING THE OFFENSIVE.

Anti-aircraft defence will be entrusted, during the period of the concentration marches, to the machine-gun and anti-aircraft artillery units having fixed positions and strongly echeloned in depth.

As the advance progresses, the depth of the zone will be increased toward the front.

The following partial zones will be distinguished:

(a) *First zone of Defence*: This is the combat zone of the first-line defence, and extends from the firing line back as far as the division P. C. The defence here is assured by special sections from the machine-gun companies and detachments of picked machine-gunners, as well as mobile anti-aircraft artillery units attached to the division especially for this purpose.

(b) *Second zone of Defence*: This is the zone of the second-line divisions. The defence here falls especially upon the machine-guns and to some extent upon the army corps anti-aircraft units and the machine-guns of the columns.

(c) *Rear zone*: It extends from the supply railheads to the detraining stations inclusive, and is defended by Army Corps anti-aircraft units.

As the offensive develops, zones (a) and (b) move forward leaving between zone (b) and the rear zone an intermediate zone having little protection and very dangerous for supply columns.

For want of available anti-aircraft artillery units, the troops in this region will probably have to provide their own protection with their own machine-guns or those which they will receive for this purpose.

In the first and second line divisions the machine-guns assigned to anti-aircraft defence will be placed under the command of a special officer (the orderly officer of division headquarters) who will maintain liaison with the anti-aircraft artillery sub-groups. In the regiment, the machine-gun officer will be responsible for anti-aircraft protection.

In fighting against the battle aviators who take part in the combat with bombs and machine-guns, it will not be sufficient merely to assure an immediate and direct defence; we must ourselves take the initiative and be the aggressor in the attack.

Besides machine-gun fire, infantry fire executed by several squads, methodically and in volleys, may give good results.

#### ANTI-AIRCRAFT PROTECTION DURING THE DEFENSIVE BATTLE.

The defence will be organized into zones as in the offensive; especial attention will be given to the systematic distribution in depth of the machine-gun nests within the sector of each division.

Conclusion, the memorandum calls attention to the necessity for a strict fire discipline and good observation. It also establishes the rule that airplane flying higher than 1,000 meters must not be fired upon. German airplanes attacked by mistake will identify themselves at night by firing a white star rocket. To request a suspected airplane to make known its nationality, a white rocket with one star will be fired from the ground.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### FLANDERS REGION.

15th Protective Flight..... Doc., R. A. F., Aug. 11th..... In Combles-Noyon Region, April 25, 1918.  
NOTE.—The 15th Protective (Battle) Flight bombed Dunkerque area the night of August 11th.

### VIMY-COMBLES REGION.

3rd Pursuit Squadron..... Doc., R. A. F. Sept. 2nd..... In Noyon-Rheims Region, July 10, 1918.

NOTE.—This squadron is believed to consist of the 27th, 34th and 77th Pursuit Flights. These flights were reported in Vosges-Switzerland Region in August, 1918, but confirmation is lacking.

252nd Reconnaissance Flight.. Doc., R. A. F., Sept. 1st..... In Rheims-Argonne Reg., Aug. 13, 1918.  
284th Reconnaissance Flight.. Doc., R. A. F., July 24 and Aug. 23.... In Noyon-Rheims R., May 20, 1918.  
288th Reconnaissance Flight.. Report, R. A. F., Aug. 26..... In Flanders Region, June 6, 1918.

### COMBLES-NOYON REGION

1st Bombing Squadron..... Doc., French source, Aug. 8th..... In Rheims-Argonne Reg., July 24, 1918.  
(1st, 2nd 3rd Bombing Flights).  
57th Protective Flight..... Machine down, French, Aug. 20..... Not previously identified.  
2nd Reconnaissance Flight... French source, Aug. 20..... In Vimy-Combles Reg., April 26, 1918.  
243rd Reconnaissance Flight. French Source, Apr. 2..... At Colmar, Vosges-Switz. Reg., Mar. 25.

### NOYON-RHEIMS REGION.

21st Pursuit Flight..... Doc. R. A. F. Aug. 8..... In Rheims-Argonne Region, July 27, 1918.  
39th Pursuit Flight..... French Source, June 16..... In Rheims-Argonne Reg., May 25, 1918.  
225th Reconnaissance Flight.. Machine down, French, Sept. 2..... In Combles-Noyon Region, May 23.  
234th Reconnaissance Flight. French Source, Sept. 3..... In Vimy-Combles Region, Aug. 19th.  
274th Reconnaissance Flight. Mach. down, French, end August..... In Flanders Region, July 5.  
This flight was reported in Argonne-Moselle region, Aug. 14, but was probably in error.

NOTE.—The 24th Reconnaissance Flight, reported in Vimy-Combles region in S. A. I. No. 41, was incorrect. This flight was last identified in Noyon-Rheims Region, Feb. 1918.

### RHEIMS-ARGONNE REGION.

2nd Protective Flight..... Doc., R. A. F., July 6th..... In Combles-Noyon Region, April 25, 1918.  
25th Protective Flight..... Doc. R. A. F., Aug. 5 th..... In Lys-Vimy Region, June 11th.  
7th Pursuit Flight..... Doc., R. A. F., Aug. 13th..... In Combles-Noyon Region, June 15, 1918.  
This transfer probably took place prior to July 15th.  
33rd Pursuit Flight..... Doc. R. A. F., July 17th..... In Lys-Vimy Region, April 1, 1918.  
57th Pursuit Flight..... Doc. R. A. F., Aug. 10th..... In Combles Noyon Region, June 26, 1918.  
63rd Pursuit Flight..... Doc., R. A. F., July 23 and Aug. 9..... In Combles-Noyon Region, June 27th.  
229th Reconnaissance Flight. Report, R. A. F..... In Argonne-Moselle Region, Feb., 1918.  
Transfer may have occurred some time ago.  
252nd Reconnaissance Flight. Doc., R. A. F., Aug. 13th..... In Noyon-Rheims Region, July 28th.

(See above later identification in Vimy-Combles Region).

### ARGONNE-MOSELLE REGION.

246th Reconnaissance Flight. French source, Aug. 1918 at Briey..... On Solonika front, June 25.

### MOSELLE-VOSGES REGION.

36th Reconnaissance Flight. Doc., French source, July 11th, at Metz. At Karlsruhe, Vosges-Switzerland Region.  
7th Home Defence Flight. French source, July, 1918, at Sarrebruck. June 27th, 1918.  
At Crefeld (Interior) May 10th.

### VOSGES-SWITZERLAND REGION

76th Pursuit Flight..... French source, July 9th at Habsheim. In Combles-Noyon Region, June 30th.

### EXTERIOR FRONTS.

22nd Reconnaissance Flight. Doc., R. A. F., Aug. 7, in Ukraine..... In Vimy-Combles Region, Jan. 1.  
Identification in Vimy-Combles may have been incorrect.

## IDENTIFICATIONS

### ARGONNE-MOSELLE REGION.

67th Pursuit Flight..... French source, Sept. 2nd, with 5th German Army..... Identified in same area, August 20th.  
31st Reconnaissance Flight. Pris. Stat., R. A. F., Aug. 27th, at Marim-bois..... Identified at same place, August 14th.  
279th Reconnaissance Flight. French source, Aug. 4th, at Porcher.... Identified same place, June 15th.

### MOSELLE-VOSGES REGION.

12th Reconnaissance Flight. Pris. Stat., R. A. F., Aug. 26, at Many.. At Morhange, same region, June 3rd.  
281st Reconnaissance Flight.. French source, July, 1918, at Lorquin.... In Sarrebourg area, same region, June 8th.  
2nd Home Defence Flight... French source, Aug. 23, at Sarreguemines. At Sarrebruck, same region, June 11th.

### VOSGES-SWITZERLAND REGION.

276th Reconnaissance Flight. French source, Aug. 6, at Altdorf..... At same place. July 7th.  
4th Mosaic Section..... French source, Aug. 1, at Altdorf..... At Schlestadt, same region, Apr. 1918.

## AIRDROMES

## ARGONNE-MOSELLE.

1. New Airdromes.	Changes in accommodation.			Present accommodation.		
	Hangars.	Sheds.	Capacity.	Hangars.	Sheds.	Capacity.
110 Arlon .....	0	0	0	0	0	0
Landing field is under construction.						
2. Changes in existing airdromes.						
10 Puxieux.....	0	0	0	2	2	32
Concrete base is now camouflaged.						
58 Lanfontaine.....	0	0	0	5	..	10
(Briey N.) Airdrome is now occupied.						
76 Jametz .....	+1	..	+2	10	4	32
Increase since 2-7-18.						
3. Photographs of the following airdromes show no changes.						
9 Mars-la-Tour. U. S. photo 2-9-18.....				7	..	14
30 Marville. French photo 23-8-18.....				14	10	60
72 Doncourt. British photo 30-8-18.....				15	..	30
4. Reported airdrome photographed and found not to exist.						
128. Avril.						

## MOSELLE-VOSGES.

1. New Airdromes.	Hangars.	Sheds.	Capacity.	Hangars.	Sheds.	Capacity.
86. Lellingen .....	+6	+6	+6	6	..	6
Hangars for bombing machines.						
2. Changes in existing airdromes.						
6. Buhl .....	-5	..	-10	36	6	109
Destroyed by British bombing units since 27-8-18.						
8. Morhange .....	-10	-1	-28	7	4	38
Destroyed by British bombing units 3-9-18. The losses in machines will probably be considerable less than 28 because there were only two flights with seven machines each identified there at the time of the raid.						
12. Lorquin .....	+3	..	+6	22	..	44
Increase since 22-8-18.						
79. Biedesdorf .....	+2	+4	+4	4	..	7
Increase since 28-6-18.						
98. Hattigny .....	+3	..	+8	16	..	34
Increase since 23-3-18.						
104. Nitting.....	+3	..	+6	5	..	10
Increase since 22-8-18.						
3. Photographs of the following airdromes show no changes.						
47 Marimont French photo 21-8-18.....				10	0	30
61 Boulay British " 2-9-18.....				28	6	48
66 Mittlebronne " " 2-9-18.....				15	..	28
78 Vatimont " " 2-9-18.....				5	..	9

## VOSGES-SWITZERLAND.

1. New Airdromes.	Hangars.	Sheds.	Capacity.	Hangars.	Sheds.	Capacity.
112 Miestratzheim.....	+3	..	+9	3	..	9
French photo 2-9-18.						
2. Changes in existing airdromes.						
22. Colmar N.....	+5	-4	+10	5	6	50
Photo shows that some hangars were reported as sheds.						
33. Schlestadt N.....	-5	..	-10	13	..	26
19 hutments have been constructed and five hangars removed since 10-8-18.						
51. Gernersheim.....	+15	..	+30	15	..	30
First information available concerning the accommodation of this airdrome.						
64. Ostheim .....	+2	..	+6	32	..	96
May not be a change. Previous photo 11-8-18 does not show complete airdrome.						
88. Altdorf.....	-2	..	-4	14	..	28
Decrease since 15-8-18.						
89. Stolzheim.....	+1	..	+2	16	..	32
Increase since 30-7-18.						
3. Photographs of the following airdromes show no changes.						
4 Schlestadt French photo 2-9-18.				9	1	32
21 Strasbourg British " 14-8-18.				1	4	60
28 Colmar S. French " 2-9-18.				23	..	50
34 Hambourg French " 23-8-18.				5	1	14

## HOME DEFENCE FLIGHTS

FROM BRITISH SUMMARY OF AIR INTELLIGENCE, AUGUST 30, 1918.

During a raid on Mannheim on the 22nd August, our machines were attacked over the objective by 15 E. A., the majority of which were Halberstadt two-seaters.'

These machines have been encountered in small numbers for some time past, during raids into Germany, but this is the first occasion on which they have engaged at close quarters.

As the only home defence units known to be operating in the Rhine area are the single-seater fighter flights (*Kampfeinsitzerstaffeln*), would seem probable that either a new series of home defence flights, equipped with two-seater fighters, has been formed, or that a certain number of the *Kampfeinsitzerstaffeln* have been re-equipped with two-seater machines, in which case it would appear necessary to rename these units.

## NEW FORMATION PROTECTIVE (OR BATTLE) FLIGHTS

FROM BRITISH SUMMARY OF AIR INTELLIGENCE, AUGUST 30, 1918.

Two new protective flights have been identified, viz. Nos. 52 and 57. In addition, there are indications of the existence of No. 47, which was formerly a reconnaissance flight on the Russian front. (Vide *Summary of Air Intelligence*, Serial No. 185, of 24-8-18.)

The highest numbered protective flight hitherto identified is the 38th, and it thus appears probably that at least 19 additional flights have been formed, giving a total of 114 new machines. (Hannoveraner and Halberstadt.)

#### DUTIES OF CONTACT PATROL FLIGHTS

FROM BRITISH SUMMARY OF AIR INTELLIGENCE, AUGUST 31, 1918.

A captured document, issued on the 4th July, 1918, by the 13th Division, then in line opposite Villers-Bretonneux, prescribes minutely the duties of the contact patrol flight allotted to the division.

The flight must keep the division constantly posted as to the front line, and generally as to its own and the enemy's positions. The area on both sides of the front line should be photographed once a week when the situation is quiet, and it is invariably to be specially photographed after a British or a German attack. The air photographs taken of the enemy's and of the German positions are to be transferred to 1/10,000 maps.

A contact patrol machine, when in action, carries two streamers on its lower planes and fires a white light bursting into stars (the usual recognition signal of a German machine), as well as a special red and white light and an occasional burst of machine-gun fire. The infantry burn flares and also make use of a white light signal to indicate the position of their front line. The former signal is also to be used "when the infantry are being fired on by our own machines".

During an infantry action, the flight is to fly at a height of 50 to 800 metres, and to obtain situation reports from battalion headquarters and convey them to higher formations. (NOTE :—Infantry in front line are only to lay out signs to show their position, and are not to transmit messages regarding the tactical situation.)

When the division is in a quiet part of the line, the machines of the flight should make a point of communicating with the infantry from the air at least once a week, but when fighting is in progress this should be done every time they go up. (After each patrol the flight is to report to the division, and is not to deal direct with the brigade.)

Great stress is laid on the necessity of "propaganda" when the division is at rest. The flight should arrange illustrated lectures to explain its work to the infantry, there is to be close liaison between the officers of either arm, practice flights are to be carried out and infantry officers and other ranks are to be attached for instruction to the flight.

#### INCREASE OF HOSTILE AVIATION IN ALSACE

FROM INDEPENDENT FORCE, R. A. F., WEEKLY SUMMARY OF AIR INTELLIGENCE, SEPTEMBER 1, 1918.

A prisoner captured by the French confirms the increase of the hostile aviation in Alsace.

Hostile reconnaissance squadrons have received orders to watch the rear of the Allied front. These reconnaissances do not appear to have satisfied the nervous German Higher Command, and, in spite of the negative information that the Squadrons have reported, the Army Headquarters persists in sending out reconnaissances.

#### AIR RAID WARNINGS

FROM INDEPENDENT FORCE, R. A. F., WEEKLY SUMMARY OF AIR INTELLIGENCE, SEPT. 1, 1918.

A German daily paper, dated the 1st August, reports increased precautionary measures against air attacks. Besides the blowing of a siren, alarm bombs, exploding at height of 300 metres, will be fired from various quarters of the town.

The procedure of signalling will be as follows:—

1. Three twenty-second blasts on the sirens with pauses of twenty seconds.
2. The discharge of two bombs at the various centres, at intervals of a minute.
3. Tramways cease running.
4. At night extinguishing of the electric street lamps.

On termination of the air raid the "all-clear" will be given by :—

1. A long-drawn blast on the alarm sirens.
2. Resumption of the tramway service.
3. At night, relighting of the streets by the electric light.

#### PROTECTION AGAINST ENEMY AEROPLANES

FROM ANNEXE TO BRITISH SUMMARY OF AIR INTELLIGENCE, SEPT. 1, 1918.

(TRANSLATION OF A GERMAN DOCUMENT).

III CORPS HEADQUARTERS,  
1A/QU/Ic. No. 164.

CORPS HEADQUARTERS,  
19-7-1918.

1. During our offensives, losses through the action of enemy aviators have proved to be extraordinarily high. In order to avoid such losses in future, and to accustom the troops to take advantage of effective methods of protection against aviators, measures must be taken during quiet periods continuously to improve the protection of the troops against enemy air attacks.

During operations on a large scale, the available anti-aircraft units, even through working in close co-operation with aircraft units, will not be able to undertake continuous protection of the troops, more especially in rear areas, although they will be of undeniable value. Anti-aircraft defence on quiet fronts naturally shows still wider gaps. Above all, protection during quiet periods is necessary in rear areas against enemy long-distance raids. The troops must themselves create this with their own machine-guns, and organize their own arrangements for interference with the enemy's intentions.

2. To ensure the safety of the troops on the march (especially at night) and during training, and the prevention of enemy air reconnaissance, the following points must be noted :—

- (1) Avoid main roads ; march as far as possible on by-roads and in small columns. In order

to avoid crowding and blocks, every march must be arranged according to a regular time-table, and allotted a definite route. Troops must not collect at stations, or in villages.

(II) A look-out for enemy machines must be kept at every halt and during the march itself. On the approach of enemy aviators, troops must clear the road and get under cover from air observation (in ditches, or in groups underneath the trees). Horses and vehicles must, if possible, be drawn up close underneath the trees on one side of the road. No movement. If the route is illuminated at night by parachute flares, halt immediately, clear the road, lie down. Pull in vehicles and horses close to the trees.

(III) All troops provided with machine-guns, and especially the machine-guns detailed for anti-aircraft defence during the march, must come into action; the latter should be mounted upon the vehicles, or otherwise disposed, so as to be immediately ready for action.

(IV) At all training exercises, at reviews and in assembly positions, especially during fine weather, look-outs and machine-guns are to be installed for observation and protective purposes. Horses must not be grouped in large numbers. Vehicles, when halted, must be placed under cover or dispersed.

Artillery must take with them to all practices the machine guns allotted for anti-aircraft defence.

(V) Ammunition columns are already provided with machine guns for their protection. Baggage and other transport columns, when moving by march route, will also be allotted machine guns. The order goes on to prescribe further detailed measures of protection, among them the following:—

In BILLETS, entrance of all suitable cellars will be marked by white luminous figures showing the accommodation available.

Zig-zag trenches will be dug round all houses, huts and tents, and their location shown by luminous arrows, on the sides of the buildings.

Every locality will be provided with sufficient dugout accommodation for the whole of the troops quartered in it.

ALONG THE MAIN ROADS, short lengths of zig-zag trenches, running obliquely from the side of the road, will be made at intervals of 100-200 metres, especially in area where an offensive is intended.

DURING A BATTLE, machine-gun nests echeloned in depth must be organized in each divisional sector.

IN CONCLUSION, the order calls attention to the necessity for strict fire discipline and a good look-out system.

Aeroplanes flying at over 3,000 feet are not to be fired at

#### NEW TYPE OF AEROPLANE ENGINE

FROM BRITISH SUMMARY OF AIR INTELLIGENCE, SEPTEMBER 1, 1918.

A FOKKER D. 7 biplane, brought down south of the Scarpe on the 23rd August, has been found to contain a new type of engine, made in Munich, and apparently called the "Bayern" (Bavarian).

It is a six-cylinder vertical water-cooled engine with 150 mm. bore and 185 mm. stroke, and it develops approximately 180 h. p.

It comprises features derived both from the Mercedes and from the Benz engines. The chief points worthy of note are:—

(1) The carburettor, which is fitted with a new type of adjustment for high altitudes.

(2) Facilities for interchange of parts; for instance the inlet and exhaust systems are interchangeable.

Detailed notes on the engine are being issued to all concerned.

#### GERMAN GROUND SIGNALS

FROM INDEPENDENT FORCE, R. A. F., WEEKLY SUMMARY OF AIR INFORMATION, SEPTEMBER 1, 1918.

(a) During a bomb raid pilots reported that an arrow was displayed on the ground at Morhange aerodrome (No. 8) pointing north. This arrow was seen by the Second Formation, and possibly was intended to indicate the direction taken by the First Formation. This tends to confirm paragraph 8 of Summary of Aeronautical Information No. 2, dated 18th August.

(b) A U. S. A. photograph (B. 1148), taken by 91st Squadron on the 22-8-18, shows an arrow pointing West on Montoy aerodrome (No. 49). On a later photograph (No. 4,1490) French) dated 30-6-18, a cross is shown on the ground.

(c) A British photograph No. 55 D. A. 2080, dated 23-8-18, shows on Sarrebruck aerodrome a cross and a straight line.

It is possible that different signs are used for showing the enemy's airmen the direction taken by the Allied airmen in each Aviation Group. Any information on this point would be interesting.

#### AEROPLANE PROPAGANDA

The propaganda of the Allied aviators is beginning to bear fruit among both the military and civilian classes, as is instanced by the following example:

Two German soldiers showed me a proclamation (signed Deutsche Frauen) which had been dropped by an Allied aviator. I asked permission to buy it as a souvenir, but they would not part with it at any price. They attached so much importance to it that they had folded it up carefully and put it back of the band in the inside of their helmets.

They said that their comrades also had some and that they read them through carefully and discussed them among themselves.

NEUSTADT: LAAECH AND CO. MACHINE SHOP, AEROPLANE FACTORY.

Located near Neustrasse at the corner of the grade crossing on the right as you go from Madgebourg

to Neustadt. (Probably opposite the Neustadt railroad station.) It has a very tall chimney, located near the station of Madgeburg-Neustadt.

Before the war, farming machinery used to be manufactured here by a force of 800 workmen. Now 2,600 people work there, among whom are 1,200 Russians, and 800 French prisoners. The rest are Germans, including 130 women. They only manufacture "scouting planes" here of 125 to 150 horse power.

The factory produces at least 12 aeroplanes a month. There are now six ready in the hangars, which are located behind the factory. When the painters shall have finished their work on them, they will be shipped by night towards Aix-la-Chapelle.

They work both night and day at this factory; up to this time there has been no shortage of raw material.

In case of an air raid they are ordered to leave the factory and flee to the fields.

#### AVIATION. ESSEN.

German aviators fly over the city every afternoon between 2 and 5 o'clock. They never fly in the morning. They come from a large aviation field at *Gelsenkirchen*, where there are hundreds of aeroplanes.

#### RED CROSS ON HANGARS.

All the aeroplane sheds in the above mentioned aeroplane fields have the red cross painted on them to deceive the Allies.

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SUMMARY OF AIR INFORMATION

CHANGES IN LOCATION OF UNITS

LYS-VIMY REGION.

5th Reconnaissance Flight.... Pris. Stat., French Source, June 5 and July 27..... Previously identified at Habsheim March 14.

COMBLES-NOYON REGION.

221st Reconnaissance Flight.. Document, R. A. F., Aug. 20..... In Vimy-Combles region, Aug. 18.  
228th Reconnaissance Flight.. Document, R. A. F., Aug. 23..... In Lys-Vimy Region, June 24.

NOYON-RHEIMS REGION.

34th Protective (Battle) Flight. Doc., R. A. F., Aug. 18..... In Combles-Noyon region, June 24.  
251st Reconnaissance Flight.. Doc. R. A. F., Aug. 11..... In Rheims-Argonne region, July 15.

RHEIMS-ARGONNE REGION.

73rd Pursuit Flight..... Doc. R. A. F., June 30..... Previously identified on Western Front (sector unknown) Feb. 27, 1918.

ARGONNE-MOSELLE REGION.

45th Protective (Battle) Flight. French source, Sept. 6, at Briey..... Not previously identified.

NOTE.—Prisoner states that this flight was formed from the 20th Protective flight (located near Laon). All but two machines of this flight were transferred to Briey where they formed the new 45th Protective (Battle) Flight.

65th Pursuit Flight ..... Doc. R. A. F., July 30 and Aug. 13, in Marimbois area.

NOTE.—This flight had not been located since being replaced by the 68th Pursuit Flight at Mars-la-Tour, during June, 1918.

VOSGES-SWITZERLAND REGION.

69th Pursuit Flight..... Pris. Stat., R. A. F., Aug., 25, at Habsheim. In Combles-Noyon region, Aug. 11.  
243rd Reconnaissance Flight.. Pris. Stat., R. A. F., Aug., 1918, at Colmar. In Combles-Noyon region Apr. 2, 1918.  
N. Reported.....  
4th Home Defense Flight..... Pris. Stat., French Source, Sept. 1, at Fribourg ..... Identified at same place some months ago.

IDENTIFICATIONS

VOSGES-SWITZERLAND REGION.

75th Pursuit Flight..... Pris. Stat., R. A. F., Aug., 1918, at Habsheim. Identified in Vosges-Switzerland region (Airdrome unknown), Aug. 12.  
76th Pursuit Flight..... Pris. Stat., R. A. F., Aug., 1918, at Habsheim. Identified same place, July 9, 1918.  
282nd Reconnaissance Flight.. Pris. Stat., R. A. F., Aug. 1918, at Sierentz. Identified at same place, July 3, 1918.

Corps Photographic Center, No. 101.... Doc. R. A. F., July 16.... In Russia.  
(Gruppenbisdstelle).

This is the first unit of this series to be identified.

AIRDROMES

ARGONNE-MOSELLE.

1. Change in existing airdromes:—

	Changes in accommodation :			Present accommodation :		
	Hangars.	Sheds.	Capacity.	Hangars.	Sheds.	Capacity.
95. St. Ail.....	+3	..	+9	12	..	36
Increase since 23-8-18.						

2. Photographs of the following airdromes shows no change:—

13. Buxieres U. S. photo 4-9-18.....	4	3	22
18. Baslieux. British photo 7-9-18.....	..	2	8
42. Mercy-le-Bas, French photo 2-9-18 .....	3	3	15
42. Batilly E. U. S. photo 7-9-18.....	7	1	26
80. Mouzay. French photo 4-9-18 .....	..	4	15

3. Reported airdrome requiring confirmation by photograph:—

103. Thumerville. 4 hangars and 10 planes reported by 96 U. S. Squadron, 4-9-18.

MOSELLE-VOSGES.

1. New airdromes:—	Hangars.	Sheds.	Capacity.	Hangars.	Sheds.	Capacity.
111. Burlioncourt .....	?	?	?	?	?	?
(7 km. S. W. of Morhange).						
114. Bruhl.....	1	Zep. ..	50	1	..	50
S. of Mannheim.						

2. Changes in existing airdromes:—

50. Speyerdorf.....	..	+4	+30	4	10	124
May not be a change. Previous photograph did not cover entire airdrome. At the south end of field there are 10 sheds with a capacity of 90 machines that could be used for housing machines by repairing the ground in front of them. At present they appear to be used as warehouses.						
86. Lelingen.....	+2	..	+2	8	..	8
92. Gros Tenquin .....	..	..	+4	..	2	10
10 machines on ground in front of hangars ; photo 5-9-18.						
99. Phalsbourg .....	+2	..	+4	7	..	19
Increase since 16-8-18.						
101. Bisping.....	+3	..	+3	6	..	12
Increase since 16-8-18.						

3. Photographs of the following airdromes show no changes:—

6. Buhl. British photo 7-9-18.....	36	6	109
8. Morhange. British photo 4-9-18 .....	7	4	38
Photo shows that some hangars have been removed and were not destroyed in air raid 2-9-18. This could not be seen on previous photograph because part of airdrome was hidden by smoke of bursting bombs.			

SUMMARY OF AIR INFORMATION, No. 43, SEPTEMBER 12, 1918.

46.	Destry. French photo 4-9-18. ....	..	2	6
	Prisoner states that dummy planes are being used here. The airdrome has not been considered active since 13-6-18.			
		Hangars.	Sheds.	Capacity.
47.	Marimont. French photo 4-9-18.....	10	..	30
66.	Mittlebronne. British photo 7-9-18.....	15	..	28
107.	Bitche. British photo 4-9-18.....	4	1	20

VOSGES-SWITZERLAND.

1.	New airdromes :—	Hangars.	Sheds.	Capacity.	Hangars.	Sheds.	Capacity.
113.	Speyer .....	?	?	?	?	?	?
	Formerly reported airdrome 108. One home defense flight identified there.						
2.	Changes in existing airdromes :—						
51.	Germersheim.....	15	15	30	..	15	60
89.	Stolzheim .....	..	..	..	16	..	32
	Now occupied.						
	Photo of Germersheim shows that sheds were reported as hangars.						



SUMMARY OF AIR INFORMATION

CHANGES IN LOCATION OF UNITS

VOSGES-SWITZERLAND REGION.

Home Defense Flight ..... Pris. stat., R. A. F., Aug., 1918, at Karlsruhe. Existence of this flight (number unknown) seems to be confirmed by prisoners' statements.  
Home Defense Flight ..... British source, Sept. 9, 1918, at Speyer, Not previously identified.

INTERIOR.

The existence of the following Home Defense Flights seems to be confirmed by deserters' statements (From Ind. Force, R. A. F.)

Home Defense Flight (number unknown), N.W. of Bonn, Aug., 1918.  
Home Defense Flight (number unknown), at Dusseldorf, Aug. 25, 1918.  
Home Defense Flight (number unknown), at Coblentz, Sept. 1918.

Corps Photographic Center No. 101..... Doc. R. A. F., July 16..... At Juniville (N. E. of Rheims.)

NOTE.—Incorrectly reported in Russia in Summary of Air Information No. 43.

Corps Photographic Center No. 110.... Report, R. A. F., June 13 and 19..... Area S. of Somme.  
Corps Photographic Center, No. 131... Doc. R. A. F., May 27..... Area S. of Bailleul.

IDENTIFICATIONS

VOSGES-SWITZERLAND REGION.

267th Reconnaissance Flight ..... Pris. Stat., French Source, Aug. 23..... At Habsheim. Identified same place, July 2, 1918.

AIRDROMES

MOSELLE-VOSGES REGION.

1. Changes in accommodation of existing airdromes:—

	Changes in accommodation :			Present accommodation :		
	Hangars.	Sheds.	Capacity.	Hangars.	Sheds.	Capacity.
61. Boulay. ....	—1	..	—1	27	6	47
(Decrease since 2-9-18 ; British photo 7-8-18.)						
86. Lellingen ..... +2	..	..	+2	10	..	10
(Increase since 4-9-18 ; British photo. 7-9-18.)						

2. Photograph of the following airdrome shows no change:—

8. Morhange (British photo. 7-9-18) ..... 7 4 38

VOSGES-SWITZERLAND REGION.

1. Photograph of the following airdrome shows no change:—

94. Diefenbach (British photo 7-9-18) ..... 9 .. 18

INTERIOR.

1. New airdrome:—

115. Hangelard (N. E. of Bonn). Accommodation unknown.

ARMY AIRCRAFT PARKS

NUMBER.	LOCATION.	LAST IDENTIFIED.
1.....	Rethel area .....	May 30, 1918.
2.....	Valenciennes area .....	Aug. 3, 1918.
3.....	Mouzon N. ....	Apr. 26, 1918.
4.....	Ghent area.....	June 24, 1918.
5.....	Arlon. ....	July 19, 1918.
6.....	Tournai area.....	July 25, 1918.
7.....	Clermont-les-Fermes.....	Aug. 13, 1918.
8.....	Eastern Front. ....	June 8, 1918.
9.....	Pouilly .....	July 7, 1918.
10.....	Eastern Front. ....	Feb. 16, 1918.
11.....	Eastern Front. ....	July 7, 1918.
17.....	Grandglise .....	July 25, 1918.
18.....	Near Fonsomme .....	Aug. 22, 1918.
19.....	Sarreguemines.....	Aug. 14, 1918.
A .....	Strasbourg .....	June 1918.
B .....	Neuf-Brisach .....	July 29, 1918.
C .....	Frescaty (S. of Metz).....	Aug. 1918.

AIR RAIDS ON FRANKFORT AND COLOGNE

During an air raid on Frankfort, prior to August 21, a number of bombs fell in the center of the town ; one of them seriously damaged the opera house. There were about 20 killed and a number wounded. The number of victims was large since the warning had been given daily for a week before the raid in question, without anything happening, so that the people thought it was a false alarm and did not take shelter. A detail which made a great impression was that the aeroplanes were not seen and the people were convinced that the bombs were dropped by Americans with machines which could fly to a height as yet unknown. The terror of air raids is increasing. In high financial circles in Frankfort the morale is very low. The issue of war is considered as disastrous to Germany. The government is blamed for not having taken the American intervention seriously, and they are afraid that German industry and commerce will be ruined by America after the war. A person recently arrived from Germany states that the greatest damage done by the English aerial bombardment of Cologne on Pentecost Monday was in the Neumarkt and Waidplatz near the Cathedral. There were more than a hundred victims. Great defensive measures have since been taken at the Rhine bridges and the important munition works in Walm, two or three kilometers outside of the town.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

VIMY-COMBLES REGION.		
78th Pursuit Flight .....	Doc. R. A. F., Sept. 2.....	At Buhl (Moselle-Vosges Region), Aug. 14.
COMBLES-NOYON REGION.		
275th Reconnaissance Flight .	Doc. French Source, Aug. 28.....	In Rheims-Argonne, May 12.
NOYON-RHEIMS REGION.		
29th Reconnaissance Flight ..	Doc. French source, Sept. 7.....	In Combles-Noyon region, June 8.
39th Reconnaissance Flight ..	Doc. French source, July 11.....	In Combles-Noyon region, June 26.
205th Reconnaissance Flight .	Doc. French source, Aug. 12.....	In Rheims-Argonne region, July 15.
283rd Reconnaissance Flight .	Doc. French source, Aug. 11.....	In Vimy-Combles region, March 28.
290th Reconnaissance Flight..	Doc. French source, Aug. 12.....	In Rheims-Argonne region, July 30.
RHEIMS-ARGONNE REGION.		
6th Protective (Battle) Flight.	Doc. French source, July 28.....	Last previous identification Jan. 27 in Noyon-Rheims region.
48th Pursuit Flight .....	Doc. French source, Aug. 14.....	In Combles-Noyon Region, Apr. 1918.
226th Reconnaissance Flight .	Doc. R. A. F., July 19.....	In Vimy-Combles region, June 15.
272nd Reconnaissance Flight.	Doc. R. A. F., Aug. 8.....	In Noyon-Rheims region, June 12.
MOSELLE-VOSGES REGION.		
218th Reconnaissance Flight .	Doc. French source, Aug. 18, with German Army.....	Identified in Combles-Noyon region, July 11.
VOSGES-SWITZERLAND REGION.		
Home Defense Flight (number unknown), at Offenburg...	Deserter's statement, R. A. F., Sept. 10..	Not previously identified.

## IDENTIFICATIONS

VOSGES-SWITZERLAND REGION.		
69th Pursuit Flight .....	Pris. Stat., French source, Sept. 2, at Habsheim .....	Identified same place, Aug. 25.
71st Pursuit Flight .....	Pris. Stat. French source, Sept. 2, at Habsheim .....	Identified at same place, Aug. 12.
75th Pursuit Flight .....	Pris. Stat., French source, Sept. 2, at Habsheim .....	Identified at same place, August, 1918.
243rd Reconnaissance Flight .	Pris. Stat. French Source, Sept. 2, at Colmar .....	Identified at same place, August, 1918.
267th Reconnaissance Flight .	Pris. Stat. French source, Sept. 2, at Habsheim .....	Identified at same place, Aug. 23.
289th Reconnaissance Flight	Pris. Stat. French source, Sept. 2, at Habsheim .....	Identified same place, Aug. 23.
EXTERIOR FRONTS (PALESTINE).		
302nd Reconnaissance Flight.	Pris. Stat. French source, Aug. 25..... This flight has been dropped from our lists on account of no recent identification.	Identified in same region Nov. 1917.

## AIRDROMES

ARGONNE-MOSELLE REGION.			Present Accommodation :		
	Change in Accommodation :		Hangars.	Sheds.	Capacity.
	Hangars.	Sheds.			
82. Labry.....	+2	..	19	..	28
Now occupied ; increase since 25-8-18.					
MOSELLE-VOSGES REGION.					
17. Thionville .....	..	..	19	..	19
Reported active ; to be confirmed.					

## DATA IN REGARD TO GERMAN FACTORIES

The "Artillerie Werkstätten" in Munich are located between Augsburg-Lindau railway and the Nymphenburger Kanal in a section known as Neuhausen-Gern. These factories are defended by four anti-aircraft guns.

The "Kisen and Stahlwerke Hoesch, A. G." in Dortmund, which manufactures hand grenades and shrapnel, and which is defended by six anti-aircraft guns on the roofs of the buildings, is located between Bar and the Bahnhof Dorstfeld.

The "Deutsche Dunlop Gummi Fabrik, A. G." located in Hanau, which manufactures tires and other rubber goods, has been closed down on account of lack of raw materials.

The "National Automobile Gesellschaft, A. G." located on the Ober-Schoenen Weids, Johanistal near Berlin, which was founded and built last year, is now engaged entirely in the manufacture of a new type of aeroplane motors.

The "Flug-Motoren and Kraft-Wagen Werke Stover, A. G." at Stettin is located between the railway from Stettin to Pasewalk and the Kleinbahn Stettin-Kasekow.

The Tobacco factories at Bielefeld and the Hunden, Westphalia, have been closed down on account of lack of raw materials.

The Zeppelin factory at Mansel, near Friedrichshafen, from four to five of the new type aeroplanes are being turned out weekly.

**CAPTURED BOMB FOR DESTRUCTION OF GERMAN AEROPLANES**

In a Rumpler Biplane brought down recently by the 13th Pursuit Squadron, was found a small high explosive bomb for the destruction of the machine. This bomb was in the form of a small rectangular box similar to those that have previously been found attached to the engines of some captured German Scouts, but this bomb was attached to the floor in the observers cockpit and painted a very dark grey making it very inconspicuous. Upon test this bomb exploded with great force five minutes after the handle was removed. The captured pilot stated that all German planes other than pursuit planes are now equipped with this apparatus.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### FLANDERS REGION.

201st Reconnaissance Flight.. Pris. Stat., and Docs. French Source, recent date..... In Noyon-Rheims region, June 29, 1918.

### ARGONNE-MOSELLE REGION.

2nd Protective (Battle) Flight. Pris. Stat. and Docs. French Source, recent date, at Autrecourt..... In Combles-Noyon reg. Mar. 10, 1918.

## AIRDROMES

### ARGONNE-MOSELLE REGION.

Changes in accommodation ;  
Hangars. Sheds. Capacity.

Present accommodation :  
Hangars. Sheds. Capacity.

#### 1. New airdrome:—

116. Barricourt ..... +5 .. +10 5 .. 10  
6 kilometers E. of Buzancy ; French photo 7-9-18.

#### 2. Photograph of following airdrome shows no change

400. Buzancy..... .. 10 .. 10  
French photo 7-9-18.

## DISTRIBUTION OF IDENTIFIED GERMAN AIR UNITS FOR WEEKS ENDING SEPTEMBER 4, AND SEPTEMBER 11, 1918

Region.	Pursuit.		Reconnaissance.		Protective.		Bombing.	
	Sept. 4.	Sept. 11.	Sept. 4.	Sept. 11.	Sept. 4.	Sept. 11.	Sept. 4.	Sept. 11.
Flanders .....	6	6	7	7	3	3	6	6
Lys-Vimy .....	10	10	19	19	2	2	3	3
Vimy-Combles .....	10	11	16	13	2	2	0	0
Combles-Noyon .....	19	17	25	24	14	13	9	9
Noyon-Rheims .....	13	13	36	41	12	13	3	3
Rheims-Argonne .....	10	12	12	10	6	7	3	3
Argonne-Moselle.....	3	4	12	12	0	1	0	0
Moselle-Vosges .....	5	4	8	9	0	0	3	3
Vosges-Switzerland .....	3	4	10	10	0	0	0	0
Exterior Fronts .....	2	2	16	17	0	0	0	0
Interior Fronts .....	0	0	2	2	0	0	0	0
Unlocated.....	4	2	1	1	0	0	0	0
	85	85	164	165	39	41	27	27

Total identified flights (all classes) on all fronts for week ending Sept. 11..... 343  
Total estimated machines belonging to such flights..... 2,955

## GERMAN AIRDROME ACCOMMODATION FROM ARGONNE TO SWISS BORDER, SEPTEMBER 7, AND SEPTEMBER 14, 1918

Region.	Airdromes.		Hangars.		Sheds.		Capacity.	
	Sept. 7.	Sept. 14.	Sept. 7.	Sept. 14.	Sept. 7.	Sept. 14.	Sept. 7.	Sept. 14.
Argonne-Moselle.....	44	45	302	312	72	72	1043	1066
Moselle-Vosges .....	37	39	231	240	74	78	1040	1134
Vosges-Switzerland .....	31	32	265	265	100	100	1343	1343
Total.....	112	116	798	817	246	250	3426	3543

## THE DESIGNATION OF GERMAN TWO-SEATER FLIGHTS

FROM R. A. F. SUMMARY OF AIR INTELLIGENCE, 7 SEPTEMBER, 1918.

The term Schutzstaffel (Protective Flight) appears to have fallen into disuse as a name for flights consisting of two seater fighters.

Captured documents show that the designation Schlachtstaffel (Battle Flight) has now been officially taken into use.

## INSPECTION AND ACCEPTANCE OF MATERIEL

FROM SUMMARY OF AIR INTELLIGENCE, R. A. F.

\*All orders for aeroplanes and their accessories are given through the Flugzeugmeisterei der Inspektion der Fliegertruppen at Charlottenburg.

Control of construction and the acceptance of material is the work of the Z. A. K. (Zentrale Abnahme Kommission) which consists of technically trained officers, N. C. O.'s and men.

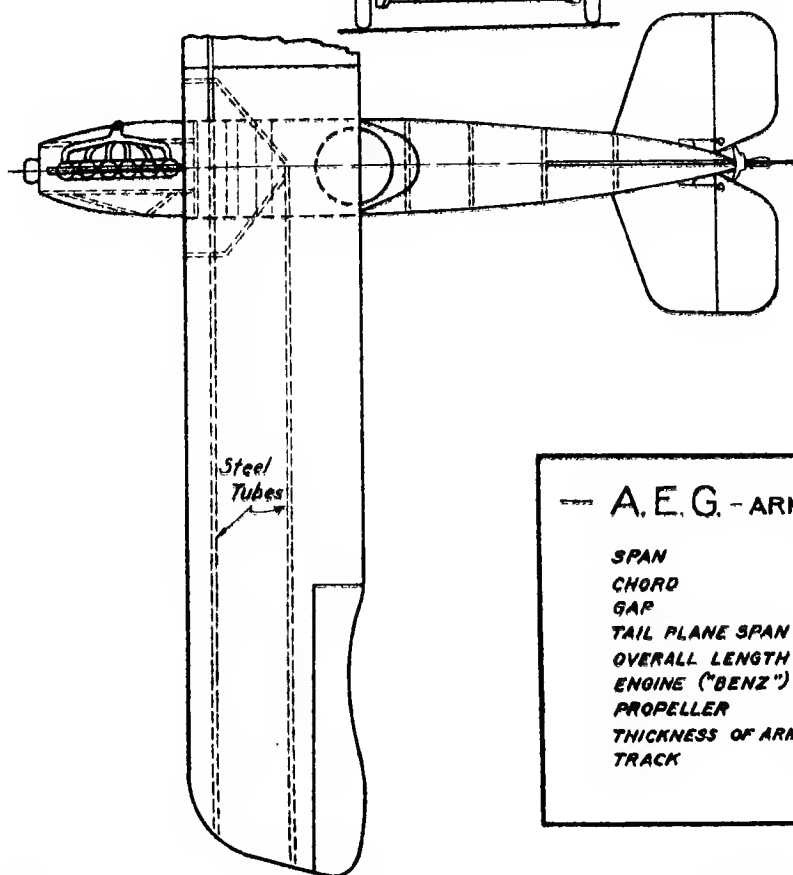
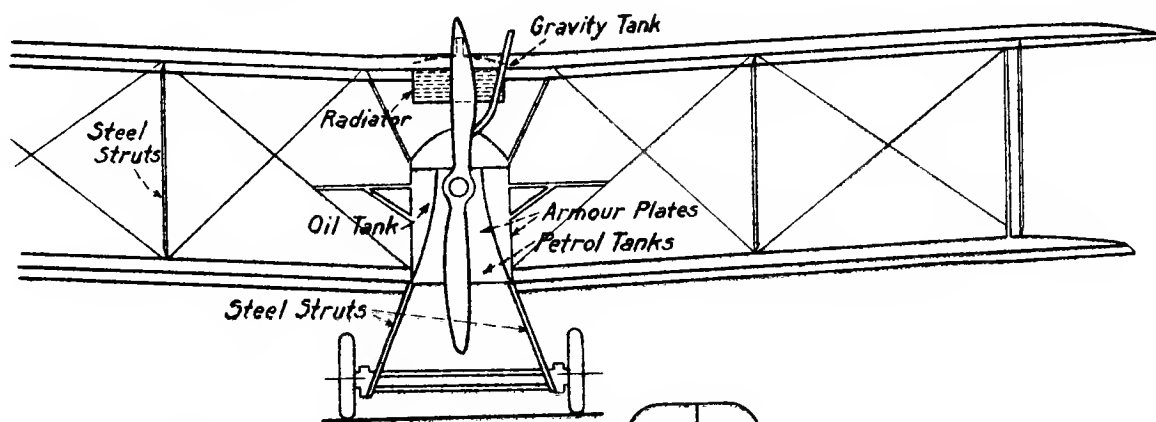
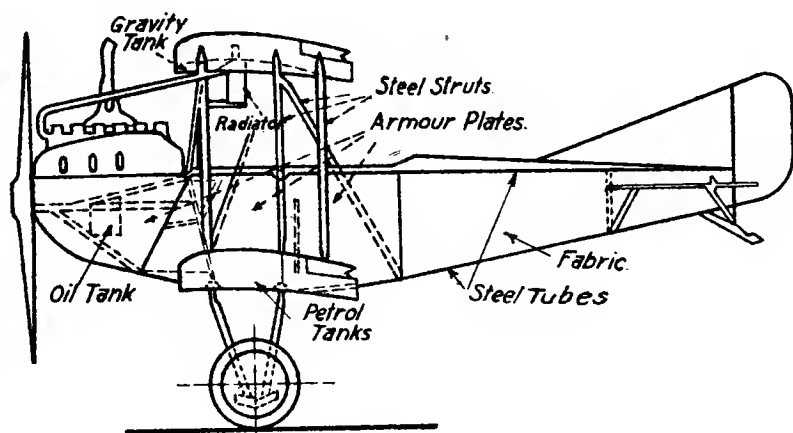
Test pilots at the aeroplane factories are always civilians, who draw a very high salary.

After the flying tests have been carried out satisfactorily by the civilian pilot, the machine is again tested by a military pilot belonging to the Z. A. K. Should the latter not be satisfied with the machine it is returned to the factory. These Z. A. K. pilots appear to be fairly susceptible to bribes.

After having been passed by the Z. A. K. machines destined for the front are sent to the Aircraft Parks, while School Machines are sent to Feas. (Flieger Ersatz Abteilungen.)

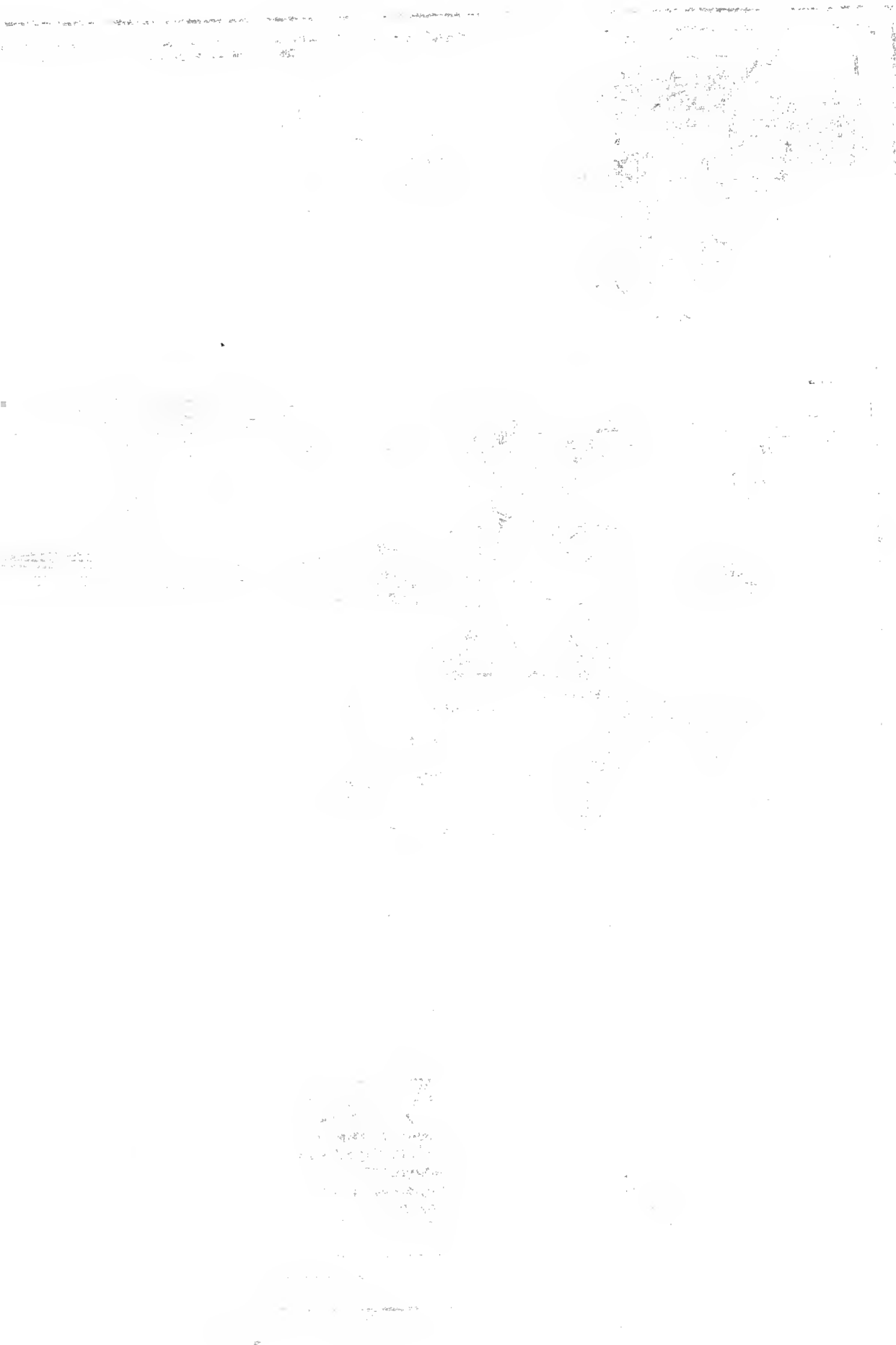
## AUSTRIAN AIRPLANES WITH AMERICAN MARKINGS

French Aviators report seeing Austrian airplanes of German type in the Besamon-Belfort area, Sept. 9, 1918. These airplanes are marked with black, white and red cocades, and are difficult to distinguish from French cocades.



# — A.E.G. - ARMoured AEROPLANE —

SPAN	42'-6"
CHORD	5'-4"
GAP	6'-6"
TAIL PLANE SPAN	9'-0"
OVERALL LENGTH	23'-7"
ENGINE ("BENZ")	200 HP
PROPELLER	10'-3" DIA.
THICKNESS OF ARMOUR	5 <sup>1</sup> / <sub>16</sub> "
TRACK	6'-10 <sup>1</sup> / <sub>2</sub> "



SUMMARY OF AIR INFORMATION

CHANGES IN LOCATION OF UNITS

FLANDERS REGION.

36th Pursuit Flight..... Docs., R. A. F., July 27..... In Noyon-Rheims region, May 29, 1918  
VIMY-COMBLES REGION.

4th Pursuit Group { ..... Doc., R. A. F. Area S. of Douai between May 19 and Aug. 3, 1918.  
8th Pursuit Group }

NOTE.—These two groups have not been previously identified and their composition is unknown. The 4th Pursuit Group was stationed at Roucourt on June 3. Roucourt is a scout airdrome and was still active on July 31, but has not been photographed since.

ARGONNE-MOSELLE REGION.

5th Protective (Battle) Flight..... British source, Sept. 16..... In Briey area. In Combles. Noyon-region, July 23, 1918.  
20th Protective (Battle) Flight..... British source, Sept. 16..... In Briey area. In Noyon-Rheims region, Sept. 6, 1918.  
32nd Protective (Battle) Flight..... British source, Sept. 16..... In Briey area. In Noyon-Rheims region, June 14, 1918.  
37th Protective (Battle) Flight..... British source, Sept. 16..... In Briey area. In Noyon-Rheims region, June 1, 1918.

NOTE.—Three of the above flights (not known which) are located at Anoux airdrome, 6 kilometers N. W. of Briey.

AIRDROMES

ARGONNE-MOSELLE REGION.

1. Changes in existing airdromes:—	Changes in accommodation:			Present accommodation:		
	Hangars.	Sheds.	Capacity.	Hangars.	Sheds.	Capacity.
85. Giraumont..... Now occupied.	..	..	..	10	..	30
29. Anoux ..... Now occupied by several protective (battle) flights.	..	..	..	8	..	16
2. Airdromes vacated:—						
9. Mars-la-Tour..... Latest report shows the airdrome still used as a landing ground, but hangars have been removed.	—7	....	—14	0	0	0
10. Puxieux ..... Vacated since 10-9-18.	—2	—2	—32	0	0	0
13. Buxieres..... Vacated since 10-9-18.	—4	—3	—22	0	0	0
14. Marimbois ..... .....	—10	....	—25	0	0	0

A. E. G. ARMORED AIRPLANE

An A. E. G. Armored airplane was recently brought down by the British. This plane was evidently designed for the purpose of carrying out offensive patrols against infantry and is furnished with armor affording protection to its personnel. The general shape of fuselage and wings closely resemble that of the A. E. C. Bomber, although of course the location of the power plane is different, the Bomber being a twin-engined machine. The sides and bottom of the fuselage are protected by 3/15 inch armor plane as is the rear of the gunners cockpit also. This armor is too light to afford any protection against armor-piercing bullets fired from the ground at a height less than 300 ft., and this machine must fly at least at an altitude of 1,000 ft., to be reasonably safe from such fire. The pilot is not provided with a machine gun, although the observer has three ; two Spandaus fixed and firing through the floor of the cockpit, forward and down at an angle of 45 degrees and a Parabellum carried on the regular turret gun mounting, typical of two seater planes.

AIR ACTIVITY DURING ATTACK ON THE ST. MIHEL SALIENT, SEPTEMBER 12-13

WEATHER: Unfavorable—clouds and wind.

ENEMY ACTIVITY: Feeble at all times. With the exception of a few reconnaissances of little importance, activity was usually confined to patrols of a half dozen to fifteen pursuit planes operating well within the enemy's line in the vicinity of his anti-aircraft defenses. Neither his planes nor his anti-aircraft artillery prevented our making constant deep reconnaissances at a very low altitude, with only slight losses to us.

OUR ACTIVITY: Pursuit, observation and bombardment units performed many valuable missions in conformity with the well organized plan. The rear areas were thoroughly searched by Army Observation planes, while operating undisturbed behind barrage, patrols established by pursuit aviation, the Corps airplanes kept in constant contact with the advance. All types of airplanes attacked the ground forces of the enemy continually throughout the advance. There was little aerial combat.

SUMMARY OF AIR INFORMATION

CHANGES IN LOCATION OF UNITS

RHEIMS-ARGONNE REGION.  
247th Reconnaissance Flight. Doc., R. A. F., Aug. 13..... In Combles-Noyon region, May 31.  
MOSELLE-VOSGES REGION.  
257th Reconnaissance Flight . Doc., R. A. F., Aug. 12, at Morhange.... Reported in Verdun area (unlocated), in August, 1918.  
INTERIOR.  
Home Defense Flight (number unknown) at Rothausen (near Gelsenkirchen), July, 1918. British source. Not previously identified.

AIRDROMES

ARGONNE-MOSELLE REGION.  
1. *Reported airdrome photographed and found not to exist:—*  
113. Olley (Jean-les-Buzy).  
MOSELLE-VOSGES REGION.  
1. *Photograph of following airdrome shows no change:—*  
Change in accommodation:  
Hangars. Sheds. Capacity. Present accommodation:  
Hangars. Sheds. Capacity.  
7. Frescaty ..... ..  
(U. S. Photo 14-9-18.)  
VOSGES-SWITZERLAND REGION.  
1. *Changes in existing airdromes:—*  
74. Niedernai.....  
Now occupied.

ENEMY TACTICS

FROM HEADQUARTERS, INDEPENDENT FORCE, R. A. F., SEPTEMBER 15, 1918  
A prisoner of the 45th Battle Flight states that battle flights are allotted two separate roles :—  
1. Short distance reconnaissance, rarely more than three miles over the lines.  
2. The machine-gunning and bombing of ground troops.

ENEMY ORGANIZATION OF AIR PHOTOGRAPHY

A captured order of the 26th June, 1918, of the 18th German Army (Avre front), lays down that the Corps Photographic Section is to be headquarters for air photography within the Corps area. Stress is laid on the need for distributing photographs rapidly and methodically to the units concerned, and also on the importance of systematically collecting and transmitting to Corps from the lower formations all suggestions and requests relating to air photography : The following appointments are created in order to co-ordinate this work—but it does not seem contemplated that any of the officers will be engaged exclusively upon it:—

In a Division ..... { The head of the Divisional Map section or the air force liaison officer, or a Staff Officer working under the senior G. S. O., will be responsible for air photography.  
Infantry Brigades and Regiments : { An officer of the existing staff is to undertake the duties of "Photographic Officer to the Troops" (Truppenbild-offizier).  
in Divisional Artillery and in artillery groups.  
In artillery sub-groups and in battalions in line ..... { The liaison officer with the infantry and the "Trench officer" are respectively to take on the work of "Officers of the Photographic Section" (Offiziere von Bild-dienst).

The organization for dealing with air photographs at Corps Headquarters is not disclosed.  
The air photographic officers appointed under this order are to undergo courses of instruction at Corps Headquarters.



SUMMARY OF AIR INFORMATION

CHANGES IN LOCATION OF UNITS

LYS-VIMY REGION.		
253rd Reconnaissance Flight .	Document, R. A. F., Aug. 12.....	At Rustenhart (Vosges-Switzerland re- gion), March 14, 1918.
NOYON-RHEIMS REGION.		
220th Reconnaissance Flight .	Document, R. A. F., Aug. 12.....	In Argonne-Moselle region, Feb. 18, 1918
ARGONNE-MOSELLE REGION.		
13th Pursuit Flight .....	Machine shot down by French, Sept. 13..	At Mars-la-Tour, Left, 18th Army front (Combles-Noyon region) about Sept. 1, 1918.

IDENTIFICATIONS

ARGONNE-MOSELLE REGION.		
64th Pursuit Flight .....	Prisoner's statement, Sept. 13, at Mars- la-Tour.	Identified at same place July 22, 1918.
65th Pursuit Flight .....	Prisoner's statement, Sept. 13, at Mars- la-Tour.	Identified in same area Aug. 13, 1918.

AIRDROMES

ARGONNE-MOSELLE REGION.		
1. Changes in existing airdromes:—		
	Changes in accommodation:	Present accommodation:
	Hangars. Sheds. Capacity.	Hangars. Sheds. Capacity.
72. Doncourt .....	—2 .. —4	13 .. 26
Decrease since 30-8-18. Airdrome is now occupied. U. S. photo 15-9-18.		
77. Batilly E.....	.. ..	7 1 26
Now occupied. U. S. photo 15-9-18.		
82. Labry.....	+2 .. +2	16 .. 30
Increase since 13-9-18. U. S. photo 18-9-18.		
90. Batilly W.....	.. ..	4 .. 12
Now occupied. U. S. photo 15-9-18.		
MOSELLE-VOSGES REGION.		
1. Changes in existing airdromes:—		
6. Buhl .....	.. ..	36 6 109
3 hangars have been removed or destroyed and 3 new ones have been constructed at the south end of the field since 4-9-18. Recent photographs of Buhl and other large airdromes show that the enemy is removing alternate hangars where they have been constructed close together and constructing new ones at least 100 feet apart. This policy has probably been adopted because of the heavy losses caused by Allied bombing.		

RANGING BY AERIAL PHOTOGRAPHY

The following is a translation of an order captured by the French. It describes a method of ranging heavy batteries by means of air photographs, without using aerial observation:

XVII CORPS.  
1A/1c/11d. 1083/18.

CORPS H. Q.  
23RD MAY, 1918.

The present state of air photographic reconnaissance work admits of heavy batteries being ranged without involving continuous observation by airplanes, balloons or observation groups, but simply by subsequently locating the points of impact by means of air photographs.

The method can be applied in the first instance to targets situated far behind the enemy's lines, on which fire for effect does not immediately follow.

By locating the points of impact on photographs, it is possible to determine the errors in range and line by comparison with features situated in the vicinity of the datum point. For this purpose, ranging should not be carried out on the target itself but on a datum point in its vicinity. It is desirable to vary the nature and intervals of the fire in order to give the enemy the impression of a harassing shoot.

Attention is, in addition, drawn to the following points:—

- Choice of the datum point (consult Section IIb).
  - The ground must be free from trees ; the nearest woods must be sufficiently far off to allow "overs" and "shorts" to be observed. It is of assistance to the airplane detailed to take the photographs if there are well defined features in the vicinity.
  - The datum point chosen must not have been a target since it was last photographed, but it is of no consequence that shoots have taken place prior to the taking of the last photograph. Until the first photograph of the ranging has been taken, it is strictly forbidden to shell the immediate vicinity of the target, more especially as one airplane can easily photograph several areas ranged on during a single flight.
- Endeavors should be made to eliminate as far as possible undue dispersion of the rounds (due to differences in ammunition). Hence, always use ammunition of the same lot, which has been stored under good conditions.
- The points of impact must be clearly visible: percussion fuses—ordinary non-delay, or with delay action if possible—should be used.

4. Lay carefully for line and range, according to the battery-board and making allowance for the error of the day. Bear in mind the angle of sight.

5. The number of rounds must not be less than ten. All rounds to be fired at the same elevation and deflection, and usually by the same gun.

6. Note down each round. Request the divisional flight to photograph the datum point on the following day or on the next favorable day, stating the exact map square in which the shell holes should be found. At the same time report to the Corps the map-square, the number of rounds fired, the nature of shell used, and the position from which they were fired. It is at Corps Headquarters that distances on the photographs are plotted.

7. In subsequent fire for effect, bear in mind that the corrections for the error of the day will be different on the day in question from those of the day on which the ranging was carried out.

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SUMMARY OF AIR INFORMATION

CHANGES IN LOCATION OF UNITS

RHEIMS-ARGONNE REGION.

251st Reconnaissance Flight..... Document, R. A. F., Aug. 11..... On the Souain front.  
NOTE.—This flight was recently incorrectly reported in Noyon-Rheims region : it apparently had not left the Rheims-Argonne region.

IDENTIFICATIONS

ARGONNE-MOSELLE REGION.

45th Protective (Battle) Flight..... Prisoner's statement. French source, Identified at Briey on Sept. 6, 1918.  
Sept. 17. At Briey, N.....

AIRDROMES

ARGONNE-MOSELLE REGION.

Changes in Accomodation			Present Accommodation.		
Hangars.	Sheds.	Capacity.	Hangars.	Sheds.	Capacity.
1. Changes in existing airdromes:—					
116. Barricourt .....	+3	..	8	..	16
Photo showing complete airdrome shows 8 hangars.					
2. Reported airdrome photographed and found not to exist:—					
122. St. Privat. U. S. photo 15-9-18.					

MOSELLE-VOSGES REGION.

1. Photograph of following airdrome shows no change:—  
107. Bitche ..... .. | .. | 4 | 1 | 20 || British photo 15-9-18. |  |  |  |  |  |

VOSGES-SWITZERLAND REGION.

1. Changes in existing airdromes.					
55. Hagenau .....	+2	..	..	9	125
Increase since 16-8-18.					
88. Altdorf.....	—2	..	12	0	24
Decrease since 2-9-18.					
2. Photograph of following airdrome shows no change.					
51. Germersheim.....	..	..	0	15	60
British photo, 15-9-18.					

DUTIES OF CORPS FLIGHTS

A captured order of the XI Corps (Somme), dated 17th May, 1918, reproduces a Second Army Order of the 4th of that month, in which it is laid down that no aviation units are to be withdrawn for rest. Corps are instructed to regulate the work of flights so as to secure as much rest as possible for the personnel ; neighboring Corps and divisions are to exchange results with a view to cutting down the amount of flying that has to be done.

Following on this ruling the XI Corps issues instructions regulating the work of the 20th Aviation Group, the commander of which has administrative control over all two-seater units in the Corps area.

The group commander is to arrange for a reconnaissance of the entire Corps sector every morning and, on an average, for a long distance reconnaissance once a week, the latter to be escorted by pursuit flights from the Army.

One pursuit flight (17th) is responsible for the protection of both the divisions in line and will, in addition, do low flying. It may also be sent up to undertake offensive operations under instructions from the Group commander.

Divisions must not send out contact patrols unless enemy attacks are either expected or in progress, but they are always at liberty to send up machines to assist in counter-battery work.

As far as possible, contact patrol, artillery and photographic missions should be combined.

# AIR INTELLIGENCE BULLETIN

## CHANGES IN LOCATION OF UNITS

### ARGONNE-MOSELLE REGION.

220th Reconnaissance Flight.

NOTE.—Identification of this flight in Noyon-Rheims region (reported in Summary of Air Information No. 49 was incorrect. This flight was last identified in Argonne-Moselle Region (airdrome unknown) on Feb. 18, 1918.

### "B" BATTLE SQUADRON.

FROM R. A. F. SUMMARY OF AIR INTELLIGENCE, SEPT. 18, 1918.

A prisoner captured by the French states that B Battle Squadron consists of the 5th, 20th, 32nd and 37th Protective (Battle) Flights, and that the squadron moved to the Verdun sector from the Laon area on Sept. 5, 1918.

NOTE.—All of the above flights have been identified in the Briey area within the past few days.

## USE OF PARACHUTES

French anti-aircraft in the sector of the First American Army, report a German plane shot down September 19th, from which the aviator descended by means of a parachute. One previous case is reported as occurring in this area on September 14th.

## GERMAN PURSUIT AVIATION

### TRANSLATION OF A GERMAN DOCUMENT.

ROLE OF PURSUIT AVIATION: It is only by losses in aerial combat that the enemy can be made to feel his inferiority in the air. Pursuit aviation can only obtain this result by offensive action. The impossibility of protection to the rear requires in general the flight in "chain" (three or four planes). The principal duty of the pursuit flight is to destroy, by repeated raids beyond the front, the ranging planes working in rear of the enemy lines and thus "blind" his artillery. To decide upon the moment and direction of these attacks the service of wireless interception will be largely used. The attacks on balloons give greatest results when they are methodically carried out, a little before our attack or during that of the enemy, by groups of flights operating against whole groups of balloons and when at the same time the premature descent of the balloons is prevented by heavy caliber fire on their places of ascension. The addition of a single pursuit plane to reconnaissance, and observation planes, to protect them, is inopportune. They must work by "chains", swarms (two or three chains) or a whole flight.

ENGAGEMENT OF THE PURSUIT AVIATION: Before the battle operations will be carried out by isolated chains as long as possible. Then "the necessity of hiding from the aerial observation of the enemy our preparations for attack will require a progressively increasing offensive activity and the entrance into line of large units up to the strength of a whole flight. The main combat, offensive or defensive, requires the simultaneous engagement of many pursuit flights, to assure the mastery of the air. These flights can only give maximum results if they are under one command. Therefore the flights will be grouped into pursuit squadrons (Jagdgeschwader) (permanent units of 3 or 4 flights, which should not be broken up) or into pursuit groups (Jagdgruppen;) (temporary units of a variable number of flights.)

THE COMMANDER OF A PURSUIT FLIGHT, GROUP OR SQUADRON: The German instructions then give the qualities which their commander should have. He is responsible for the instruction and the aggressiveness of his unit. He keeps it informed of the tactical situation, the atmospheric conditions, prescribes the formation for the attack and its objectives. He prescribes by exact orders the engagement of his units in pursuance of the instructions which he receives from the Army or the Army Corps through the Commander of the aviation. He keeps in close liaison with the commanders of other aviation units near him. He must keep himself informed of the enemy aerial activity by studying the reports of the Anti-aircraft artillery, of the balloons, of pursuit flights, of the wireless interception and by the observations he makes personally in the Anti-aircraft artillery observatories. The grounds of the flights of a same group must be near each other; on quiet fronts, in proximity of these grounds, locations must be provided beforehand for those which would be necessary for pursuit flights which might be brought as reinforcement. The commander of a pursuit squadron carries on the command of his unit in the air as well as on the ground, he brings all his squadrons together, on the battle field, places it in order, disposes it in height, determines the objectives, and assures its coherence through the precision of his orders. Owing to its superior instruction and coherence, the pursuit squadron is better than the pursuit group for an ensemble action and constitutes the most powerful instrument to secure the freedom of the air.

SUMMARY OF AIR INFORMATION

CHANGES IN LOCATION OF UNITS

VIMY-COMBLES REGION.

1st Pursuit Flight..... Document, French source, Aug. 15..... In Noyon-Rheims region, June 20.  
33rd Pursuit Flight..... French source, Aug. 27..... In Rheims-Argonne region, July 27.

COMBLES-NOYON REGION.

2nd Pursuit Flight..... Document, French source, Aug., 1918.. In Lys-Vimy region, June 29.

NOYON-RHEIMS REGION.

53rd Pursuit Flight..... French source, Aug. 23..... In Rheims-Argonne region, Aug. 12, 1918.  
79th Pursuit Flight..... French Source, Sept. 4..... In Combles-Noyon region, June 3, 1918.

RHEIMS-ARGONNE REGION.

12th Pursuit Flight..... French source, Sept. 2..... Combles-Noyon region, Aug. 10, 1918.  
15th Pursuit Flight..... French source, Sept. 2..... In Combles-Noyon region, Aug. 10, 1918.

ARGONNE-MOSELLE REGION.

206th Reconnaissance Flight.. Document, French source, Sept. 8. With In Noyon-Rheims region, Sept. 1, 1918.  
Army Detachment C.

2nd Pursuit Squadron.

The German official communique of Sept. 20, 1918, states that the 2nd Pursuit Squadron, under command of Lt. Baron von Boenigk, shot down 81 Allied airplanes between the Meuse and the Moselle between Sept. 12 and Sept. 18.

This squadron is believed to consist of the 12th, 13th, 15th and 19th Pursuit Flights. The 12th and 15th flights were last identified in the Rheims-Argonne region on Sept. 2, the 13th flight was identified at Mars-la-Tour on Sept. 13, and the 19th flight was last identified in the Combles-Noyon region on August 13.

In view of the statement contained in the German communique, it is possible that the 12th, 15th and 19th Pursuit Flights are also in the Argonne-Moselle region at the present time. (To be confirmed.)

IDENTIFICATIONS

ARGONNE-MOSELLE REGION.

44th Reconnaissance Flight... French source, Sept. 2. At Montmedy... Reported at Stenay (same region) in July, 1918.  
280th Reconnaissance Flight.. Prisoner's statement, French source, Identified in Longuyon (same region) on Sept. 2. At Montmedy. June 7, 1918.

AIRDROMES

ARGONNE-MOSELLE REGION.

1. Photographs of the following airdromes show no change:—

	Changes in accommodation:			Present accommodation:		
	Hangars.	Sheds.	Capacity.	Hangars.	Sheds.	Capacity.
19. Cosnes .....	..	..	..	13	..	13
British photo, 16-9-18.						
81. Constantine Farm .....	..	..	..	4	2	20
British photo 16-9-18.						

2. Reported airdrome photographed and found not to exist:—

100. Revemont. British photo 16-9-18.

MOSELLE-VOSGES REGION.

1. Changes in existing airdromes:—

61. Boulay ..... —1 .. —1 26 6 46  
Decrease since 7-9-18. British photo 16-9-18.

2. Photographs of the following airdromes show no change:—

7. Frescaty .....	..	..	..	..	4	100
British photo 16-9-18.						
8. Morhange .....	..	..	..	7	4	38
British photo 16-9-18.						
12. Lorquin .....	..	..	..	22	..	44
British photo 16-9-18.						
98. Hattigny .....	..	..	..	16	..	34
British photo 16-9-18.						
104. Nitting.....	..	..	..	5	..	10
British photo 16-9-18.						

DISTRIBUTION OF IDENTIFIED GERMAN AIR UNITS FOR WEEKS ENDING SEPTEMBER 14 AND 21, 1918

Region.	Pursuit.		Reconnaissance.		Protective.		Bombing.	
	Sept. 14.	Sept. 21.	Sept. 14.	Sept. 21.	Sept. 14.	Sept. 21.	Sept. 14.	Sept. 21.
Flanders.....	6	7	7	8	3	3	6	6
Lys-Vimy .....	10	9	19	20	2	2	3	3
Vimy-Combles .....	11	13	13	13	2	2	..	..
Combles-Noyon .....	17	14	24	23	13	11	9	9
Noyon-Rheims .....	13	13	41	38	13	10	3	3
Rheims-Argonne .....	12	12	10	12	7	7	3	3
Argonne-Moselle .....	4	5	12	12	1	6	..	..
Moselle-Vosges .....	4	4	9	10	..	..	..	3
Vosges-Switzerland.....	4	4	10	9	..	..	..	..
Exterior Fronts .....	2	2	17	17	..	..	..	..
Interior.....	0	0	2	0	..	..	..	..
Unlocated .....	2	2	1	1	..	..	..	..
Total	85	85	165	163	41	41	27	27

Total identified flights (all classes) on all fronts for week ending Sept. 21..... 342  
Total estimated machines belonging to such flights..... 2955

**GERMAN AIRDROME ACCOMMODATION FROM ARGONNE TO SWISS BORDER, SEPTEMBER 14  
AND SEPTEMBER 21, 1918**

Region.	Airdromes.		Hangars.		Sheds.		Capacity.	
	Sept. 14.	Sept. 21.	Sept. 14.	Sept. 21.	Sept. 14.	Sept. 21.	Sept. 14.	Sept. 21.
Argonne-Moselle.....	44	40	289	269	72	67	1043	954
Moselle-Vosges .....	39	39	240	239	78	78	1134	1133
Vosges-Switzerland.....	32	32	265	265	100	100	1343	1343
Total .....	115	111	794	773	250	245	3520	3430

**NEW ENEMY MONOPLANE**

There has been numerous reports recently of a new enemy monoplane scout which in some cases has been seen at extremely high altitudes. Attached herewith is a reproduction of a document recently captured by our First Army which evidently refers to this new machine. It appears to be of Fokker design.

**MARKING OF ENEMY AIRCRAFT**

In the vicinity of Mars-la-Tour enemy aircraft reported as black and white striped, stripes on nose being perpendicular to line of flight, and those on fuselage being parallel to line of flight and extending from cockpit throughout the length of the fuselage.

SUPPLEMENT TO A.-T.-B. N° 140  
FOR 7<sup>th</sup> AUG. 1918

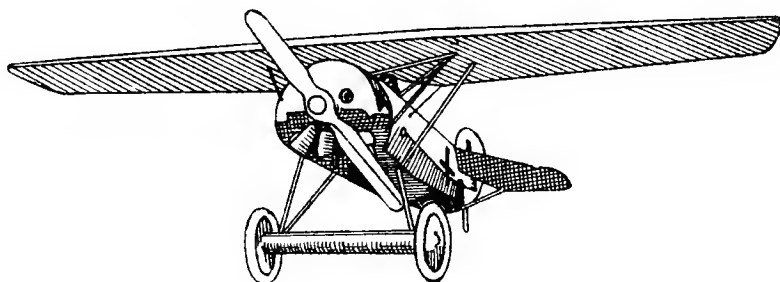
## NEW "PARASOL MONOPLANES" AS SHOWN ON SKETCH

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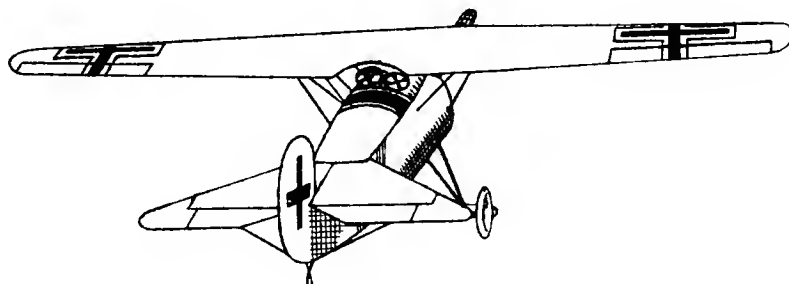
WILL BE USED IN THE ARMY. ALL PERSONEL WILL BE INSTRUCTED IN THE APPEARANCE OF THIS NEW "COMBAT ONE SEATER."

V. S. D. A. O. K.  
CHIEF OF GENERAL STAFF  
SIGNED  
REINHARDT  
COL.

FRONT VIEW



REAR VIEW







# SUMMARY OF AIR INFORMATION

## AIRDROMES

### VOSGES-SWITZERLAND REGION.

#### 1. *New airdrome :*

	Changes in accommodation.			Present accommodation :		
	Hangars.	Sheds.	Capacity.	Hangars.	Sheds.	Capacity.
117. Steinenstadt.....	+ 2	+ 2	+ 10	2	2	10

## RECRUITING OF OFFICERS FOR THE AIR SERVICE

The following document is of interest :

"62ND RES. FIELD ARTILLERY REGT.  
No. 4, 161/18.

20-6-18.

The C. G. S. of the Field Army wishes that all officers be reminded of his circular dated 26th June, 1917, referring to the requirements for young officers existing in the Air Service. A continuous flow of officers is necessary in order to maintain an adequate supply of officer pilots."

Previous documents and statements of recently captured prisoners have emphasized the present difficulty experienced in obtaining officers for the Air Service.

## ARMAMENT OF TWO-SEATERS

A prisoner of war captured recently by the French, who belonged to the 216th Squadron (reconnaissance and artillery observation), states that in his squadron only tracer and armor-piercing ammunition is used ; no incendiary or explosive.

He further states that there are in use Halberstadt two-seaters fitted with four machine guns, mounted as follows :—A fixed gun for the pilot, one on the turret mounting in the observer's cockpit, and two coupled together fitted inside the fuselage and firing between the observer's legs. These machines are only used for bombing and machine-gunning troops on the ground.

## INFORMATION IN REGARD TO AUSTRO-HUNGARIAN AVIATION

From information recently received it is learned that the Austro-Hungarian field aviation has lately undergone certain important variations.

We give herewith the principal information that modifies, in part, what was stated in Issue No. 8—Part IV—of "Military News."

### GENERAL REMARKS.

In the zone of operations the Command of the air forces is entrusted to the Commanders in Chief of the aviation forces of the Army Groups ("Oberluftstreitkräfte Kommando", or, more briefly, "Ober-Koluft"), from which depend the Army Aeronautic Commands ("Kommando der Luftfahrtruppen", or, more briefly, "Koluft").

The employment of the bombardment "Geschwader" is also the special business of the former, while the direction of the scouting chasing, and fighting service is entrusted to the latter.

### FIELD FORMATIONS :

The Field Formations ("Feldformationen") consist of :

(a) *Aviation Companies for Short Distance Scouting* ("Detail-Aufklarungs-Komp", or "D-Komp"), assigned to the Divisions, whose duty it is to make brief scouting flights (ten kilometers at most within the enemy's lines,) to do liaison service with the infantry, liaison service with the artillery, and eventually bombardment service.

(b) *Aviation Companies for Long-Distance Scouting* ("Ferne-Aufklärungskomp", or "F-Komp"), assigned to the Army Corps or to the Armies.

(c) *Aviation Fighting Companies* ("Kamp-Flieger-Komp", or "K-Komp"), assigned to the Army Corps. They may be either *Chasing-Companies* ("Jagd-Komp", or "J-Komp"), or *Battle Companies* ("Schlacht Komp"), according to whether their task is to escort scouting planes, or to rake enemy infantry and batteries with machine-gun fire from a low altitude.

(d) *Photographic Aviation Companies* (Photo-Komp), assigned to the Armies.

(e) *Moving-Picture Aviation Companies* ("Reihenbildkomp"), which it appears have always been or are to be assigned to the Army Commands.

(f) *Bombardment Aviation Companies* ("Geschwader", or "G-Komp"), depending on the Army Groups.

All the aviation companies, except the bombardment ones, depend originally on the Army "Koluft", which is situated at the Army Command. The "Koluft" disposes of the personnel, sees to the transfers, and looks after the supplying of materiel.

For their employment, on the other hand, the companies depend on the General Staffs of the large units to which they are assigned, by means of liaison organs. The Divisional Companies receive their orders from the Command of the Army Corps, upon request from the Division Commands.

With every Army Corps there is an Aviation Liaison Officer ("Gruf")—it is not known whence

comes this abbreviation—who looks after the coordination of the various request according to the management of the Army Corps, and takes measures accordingly. This Liaison Officer is not permanent ; the charge is entrusted in turn every two weeks successively to each of the Observation Officers of the Divisional and Army Corps Scouting Companies.

#### OPERATIONS

On the 21st instant weather conditions prevented our operations from being active.

#### THE ROYAL AIR FORCE REPORT THE FOLLOWING HONORS AND AWARDS

The Distinguished Service Order has been awarded 1st Lt. A. F. Bonnalie, U. S. Air Service.

The Distinguished Flying Cross has been awarded :

Lt. G. A. Vaugh, U. S. A. S.  
Lt. T. J. Herbert, U. S. A. S.  
1st Lt. M. L. Campbell, U. S. A. S.  
1st Lt. L. A. Hamilton, U. S. A. S.  
Lt. J. A. Keating, U. S. A. S.

SUMMARY OF AIR INFORMATION

CHANGES IN LOCATION OF UNITS

LYS-VIMY REGION.		
18th Reconnaissance Flight ..	Source, R. A. F., Sept. 10.....	Reported at Montoy in Moselle-Vosges Region, in August, 1918.
RHEIMS-ARGONNE REGION.		
7th Protective (Battle) Flight.	Document, R. A. F., July 14.....	In Combles-Noyon Region, April 12.
UNLOCATED (WESTERN FRONT).		
47th Protective (Battle) Flight.	Prisoner's statement, R. A. F., August, 1918.	Not previously identified.

AIRDROMES

# ARGONNE-MOSELLE REGION.

## I. Reported airdromes photographed and found not to exist :

- 106. Allamont (Moulotte.)
- 109. Chatillon.

# MOSELLE-VOSGES REGION.

## I. Reported airdromes requiring confirmation by photograph :

- 2133. Landau (40 kilometers S. W. of Speyer). 17 hangars and 12 machines reported 16-9 18.

# VOSGES-SWITZERLAND REGION.

## I. Reported airdromes requiring confirmation by photograph :

- 2107. Marmoutieres (6 kilometers S. E. of Zabern). Reported 22-9-18.
- 2109. Enzheim (E. of Molsheim). 2 hangars reported 16-9-18.

# INTERIOR.

## I. New airdromes :

- 123. Coln.  
Formerly reported airdrome No. 123. Occupied by one Home Defense Flight.
- 133. Coblenz.  
Formerly reported airdrome No. 133. Occupied by one Home Defense Flight.
- 134. Bonn.  
Formerly reported airdrome No. 134. Occupied by one Home Defense Flight.
- 140. Dusseldorf.  
Formerly reported airdrome No. 140. Occupied by one Home Defense Flight.
- 142. Lohausen (N. of Dusseldorf).  
Formerly reported airdrome No. 142. Occupied by one Home Defense Flight.
- 143. Crefeld (N. W. of Dusseldorf).  
Formerly reported airdrome No. 143. Occupied by one Home Defense Flight.
- 144. Gelsenkirchen (N. E. of Dusseldorf).  
Formerly reported airdrome No. 144. Occupied by one Home Defense Flight.
- 145. Herne (N. E. of Dusseldorf).  
Formerly reported airdrome No. 145. Occupied by one Home Defense Flight.
- 146. Boblingen (near Stuttgart).  
Formerly reported airdrome No. 146. Occupied by one Home Defense Flight.

## 2. Reported airdromes requiring confirmation by photograph :

- 2108. Unt Aichen (near Stuttgart).
- 2146. Frankfort (N. E. of Mainz).

NOTE.—All reported airdromes will now be given a number above 2000. For example—reported-airdrome No. 103 will be given No. 2103, to avoid confusion with confirmed airdrome of the same number.

OPERATIONS

On the 22nd instant weather conditions prevented our operations from being active.  
The R. A. F. Communiqués credit the following air victories to American Aviators flying in British Squadrons :—

Lt. R. G. Landis .....	10 (balloons)	Lt. J. E. Bondwin.....	1
Lt. P. E. Luff .....	5	Lt. A. P. Diamond.....	1
Lt. J. C. Donaldson.....	4	Lt. R. D. Gracie.....	1
Lt. H. G. Shoemaker.....	4	Lt. T. J. Herbert.....	1
Lt. H. L. Bair.....	3	Lt. W. W. Lauer .....	1
Lt. I. P. Corse .....	2	Lt. A. F. Mathews .....	1
Lt. G. A. Vaughn.....	2	Lt. O. A. Ralston.....	1
Lt. D. S. Poler.....	2 (balloons)	Lt. Schlotzhauer .....	1
Lt. E. H. Barksdale.....	1	Lt. H. D. Stier.....	1

Air victories are also credited by the R. A. F., to members of American Squadrons operating with the British, as follows :

Lt. H. R. Clay .....	5	Lt. R. M. Todd.....	2 (balloons.)
Lt. L. A. Hamilton .....	5 (balloons)	Lt. W. J. Armstrong .....	1
Lt. M. L. Campbell .....	3	Lt. J. F. Campbell.....	1
Lt. J. O. Creech.....	3	Lt. H. C. Knotts .....	1
Lt. G. V. Seibold.....	3	Lt. W. B. Knox.....	1
Lt. E. W. Springs .....	3	Lt. C. I. Mc Lean .....	1
Lt. C. Bissell .....	2	Lt. W. D. Tipton .....	1
Lt. F. A. Dixon .....	2	Lt. G. D. Wicks .....	1
Lt. F. E. Kindley.....	2	Lt. R. D. Williams.....	1
Lt. T. L. Moore .....	2	Lt. L. T. Wylly .....	1

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### LYS-VIMY REGION.

45th Reconnaissance Flight... Document, R. A. F., Aug. 2..... On Eastern Front, June 18, 1918.  
NOTE.—Identification on Eastern Front may have been incorrect as this flight was formerly in the Vimy-Combles region.  
5th Bombing Squadron..... Document and machine down, R. A. F.,  
(4th, 5th and 6th Bombing Sept. 6 and Sept. 18..... In Rheims-Argonne region, Aug. 10, 1918.  
Flights.)

NOTE.—From recent prisoners' statements and a captured document, it appears that this squadron returned to the Tournai area about the middle of August.

### ARGONNE-MOSELLE REGION.

2nd Pursuit Squadron..... On the St. Mihiel front, Sept. 10, 1918.  
(12th, 13th, 15th and 19th Pursuit Flights.)

NOTE.—The movement of this flight to the St. Mihiel front appears to be confirmed by the German Official Communiqué (see *Summary of Air Information* No. 52) and machine of the 13th flight shot down. It appears probable that the squadron moved to this area about the 11th or 12th of September.

### INTERIOR.

7th Home Defense Flight.... Escaped prisoner's statement, R. A. F. At Crefeld. This flight was reported at Sarrebruck (Moselle-Vosges region) in July, but was formerly in Crefeld.

## IDENTIFICATIONS

257th Reconnaissance Flight.. Document, R. A. F., Sept. 1918..... At Morhange. Identified at same place Aug. 12, 1918.

## ENEMY AERIAL ACTIVITY

Only slight activity on the part of the enemy pursuit planes, mainly in the sectors north of VERDUN and just west of the MOSELLE.

Reconnaissance planes were active in the region east of VERDUN.

## POSSIBLE ARRIVAL OF A NEW BOMBING SQUADRON IN ALSACE

FROM HEADQUARTERS, INDEPENDENT FORCE, R. A. F., 21-9-18.

A report has been received that a number of bombing machines arrived recently at Freiburg. They were to carry out raids on Epinal, Lure and Belfort, as well as on American camps. This report may indicate the arrival of a new bombing squadron at the front.

## BALLOON BARRAGES

FROM HEADQUARTERS, INDEPENDENT FORCE, R. A. F., 21-9-18

Prisoners state there are two anti-aircraft balloon barrages between Metz and Thionville; one between Richemont and Hagondange, and the other off Woippy. These protect the valley of the Moselle.

## INFORMATION RECEIVED FROM MILITARY INFORMATION SECTION, ETAT MAJOR, EVIAN-LES-BAINS

SEPTEMBER 18, 1918

The following Anti-aircraft defenses are reported :

MOUTIERS. (2 klm. 500 S. E. of Briey.) Four guns and one electric projector have been placed at the cross-roads 600 metres E. of the Moutiers church on the Southern corner of the road leading to Homecourt. Another informant stated, however, that since May 1918 there have been no anti-aircraft guns in Moutiers, but that the projector is believed to be still there.

AUBOUÉ. (5 klm. S. E. of Briey.) Three anti-aircraft guns, three machine guns and one projector have been placed 1 klm. E. N. E. of the Auboué church, about 100 metres S. of the Homecourt-Auboué road.

JËUF. (5 klm. 400 S. E. of Briey.) On Hill 215 located 1 klm. E. N. E. from the church, two anti-aircraft guns and six machine guns are emplaced. A projector is located on the same hill.

HAGONDANGE. (17 klm. E. of Briey.) About June 25, 1918, an informant observed throughout the vicinity of Hagondange, and especially between Hagondange and Ay (2 klm. 500 E., of Hagondange) about 40 captive balloons. Although these were believed to prevent the arrival of Allied airplanes, they were not effective, according to the informant, because in spite of them the airplanes passed. According to another informant there is a line of balloons between Rombas (11 klm. E. of Briey) and Hagondange. These balloons support wire netting to prevent the passage of airplanes.

**OPERATIONS**

On September 23rd we sent out several pursuit patrols.

On September 23rd several reconnaissances over our own lines for the purpose of determining the amount of circulation visible from our front line. Though the circulation in our rear areas was very marked the exceedingly bad visibility made this invisible from our front line.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### NOYON-RHEIMS REGION.

220th Reconnaissance Flight. . . Document, R. A. F., Aug. 12. . . . . In Argonne-Moselle region. February 18.

## IDENTIFICATIONS

### VOSGES-SWITZERLAND REGION.

282nd Reconnaissance Flight. . . Prisoner's statement, R. A. F., Sept. 2. . . . . At Sierentz. Identified in same place. August, 1918.

## AIRDROMES

### ARGONNE-MOSELLE REGION.

1. *Reported airdrome photographed and found not to exist:—*

2112. Sorbey. British photo.

### MOSELLE-VOSGES REGION.

	Present Hangars.	accommodation : Sheds.	Capacity.
1. <i>Changes in existing airdromes:—</i>			
17. Thionville (new occupied) . . . . .	19	..	19
2. <i>Reported airdrome, requiring confirmation by photograph :</i>			
2112. Wolsdorf (S. E. of Thionville).			

### VOSGES-SWITZERLAND REGION.

1. *Reported airdrome requiring confirmation by photograph:*

2106. Altenheim (S. W. of Hochfelden). Pursuit flight reported in this vicinity.

## INFORMATION ON 243rd RECONNAISSANCE FLIGHT

FROM R. A. F. SUMMARY OF AIR INTELLIGENCE, 23-9-18

**CASUALTIES AND REPLACEMENTS.** A prisoner, formerly in the 243rd Reconnaissance Flight, in Alsace, states that casualties resulting from crashes and enemy action were heavy; a large percentage of the casualties were due to indifferent piloting. During the period March—June last, an average of two machines were destroyed every week, and replaced by the Army Aircraft Park. In more than half of these cases, the crew were killed. Deliveries of new machines from the Army Aircraft Park were prompt.

**EQUIPMENT AND DUTIES.** The 243rd Reconnaissance Flight is equipped with 9 two-seaters, two of which are Rumplers. The number of machines serviceable at any one time was, however, often much below this figure. The flight is the long distance reconnaissance unit working for "B" Army Detachment, but, unlike units of this type on active fronts, also carries out artillery work.

Another feature in this flight is that a scout is attached, which performs escort duties to reconnaissance machines.

Captain von Mullendorf commands the 243rd Reconnaissance Flight.

## ENEMY AERIAL ACTIVITY

Enemy aviators fairly active.

One plane dropped bombs north of MONTAUVILLE.

Numerous reconnaissance missions carried out mainly East of VERDUN and in region of the MOSELLE.

Two enemy machines were brought down.

One enemy balloon brought down.

## EFFECT OF AIR OPERATIONS

FROM SUMMARY OF AIR INTELLIGENCE, R. A. F., SEPTEMBER 20, 1918

Prisoners of a bombing squadron state that a great deal of nervousness has been caused by our low flying attacks on German airdromes, and there is anxiety in night bombing squadrons lest their airdromes should also be attacked in a similar way, either by day or by night.

## ADMINISTRATIVE ORGANIZATION IN AUSTRIAN AIR SERVICE

FROM THE BRITISH

A prisoner of the 24th Reconnaissance Company, which is located in the 11th Army area, states that before any war flight is made by any machines in this area, authority must be obtained from the "Koluft" (Aviation Section at Army Headquarters). The "Koluft" in turn must obtain authority from the Army Operations Branch. Hostile aircraft may even fly over the airdrome, yet no scout may go up in pursuit until permission has been received from Army Headquarters. Pilots find difficulty in obtaining permission from their commanding officers to carry out practice flying. The prisoner in six months at the front had only flown over the lines five times, and had not yet received his brevet as a war-pilot. This state of affairs is due to the fear of losing pilots and machines, but the prisoner considered that fewer machines would be lost if more facilities were granted for practice flying.

**INFORMATION RECEIVED FROM MILITARY INFORMATION SECTION, ETAT MAJOR  
EVIAN-LES-BAINS**

SEPTEMBER 10, 1918

The following anti-aircraft defenses are reported :

AUBOUE. Two machine guns are reported as being located 400 metres N. of the Church.

HOMECOURT. One gun is located 2 klm. N. W. of the church and three revolving cannons and machine guns are located on the foot bridges in the iron works.

JŒUF. Machine guns are located on Hill 215 (1 klm. E. N. E. of the church.) Two guns and three machine guns are located 1 klm. 600 E. S. E. of the church.

ST. MARIE-AUX-CHÊNES. One battery has been located for about a year in the arbor near the cemetery.

MONTOIS-LA-MONTAGNE. Several guns and a projector are located on Hill 331 (2 klm. 500 E. N. E. of the village.)

NORROY-LE-VENEUR. (4 klm. E. of St. Privat.) Four large guns are situated in concrete pits 1200 metres S. W. of the town.

ABBEVILLE. (3 klm. 500 N. W. of Conflans.) One battery is located in the Labry woods.

ST. PRIVAT. A projector is located 700 metres S. S. W. of the church.

NEUFCHÉF. A projector is located 200 metres South of the town.

SANCY. (3 klm. S. E. of Audun-le-Roman.) A projector is located on Hill 355 (2 klm. W. of Sancy.) A battery is located near the Malavillers-Anderny road.

TIERCELET. (4 klm. W. of Villerupt.) One gun has been reported 500 metres N. of the cemetery and projector 500 metres further North.

**OPERATIONS**

Pursuit patrols between VERDUN and the MOSELLE.—Few combats but none decisive.  
Reconnaissance squadrons carried out a few missions.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### VIMY-COMBLES REGION.

7th Bombing Squadron..... Prisoner's statement and machine down,  
(22nd, 23rd, and 24th Flights). R. A. F., Sept. 14, and 22..... In Combles-Noyon region, June 17, 1918.

### ARGONNE-MOSELLE REGION.

33rd Reconnaissance Flight .. Machine down, American source, Sept. 24. At Briey. In Combles-Noyon region,  
Aug. 3, 1918.

## AIRDROMES

### ARGONNE-MOSELLE REGION.

Changes in accommodation :				Present accommodation :		
Hangars.	Sheds.	Capacity.		Hangars.	Sheds.	Capacity.
1. <i>Changes in existing airdromes :—</i>						
54. Thonne-les-Pres.....	—3	+3	0	2	3	38
(3 sheds have been incorrectly reported as hangars. French photo 15-9-18.)						
56. Longuyon .....	+1	..	+7	13	..	25
(One hangar under construction for 2 months has been completed since 11-8-18. French photo 15-9-18.)						
2. <i>Photograph of the following airdrome shows no change :—</i>						
103. Autrecourt .....	..	..	..	..	9	80
(French photo 16-9-18.)						

### FRESCATY AIRDROME No. 7, S. W. OF METZ.

This airdrome was reported to have been on fire Sept. 23, 1918. No photographs have been taken since then to verify this report or determine the amount of damage done.

## ENEMY AERIAL ACTIVITY

Pursuit fairly active. Our balloons were frequently attacked and one brought down.  
Numerous reconnaissances east, south and south-east of Verdun.  
Deep reconnaissances over the region just west of Verdun.

## CO-OPERATION OF AIRCRAFT WITH INFANTRY AND ARTILLERY

FROM SUMMARY OF AIR INTELLIGENCE, R. A. F. SEPT. 24, 1918

Instructions, issued by the 1st Bavarian Reserve Corps (in line North of Arras) and dated 30-4-18, show that the enemy was endeavoring to improve co-operation of aircraft and balloon with infantry and artillery ; some extracts from this document are translated below :—

1. "Divisions will co-ordinate the co-operation of aircraft, balloons and survey sections, according to instructions previously issued by the Army. Divisions, balloons, and the 268th Reconnaissance Flight will report, every Thursday, on what days co-operation has been carried out and what experiences have been gained."

2. "The recent fighting has shown that aircraft and artillery have not had sufficient training for the engagement of fleeting targets. Reports from airplane wireless intercepting stations prove that the British are superior to us in this respect. This state of affairs must be changed. In future, provided the weather is suitable, at least one shoot a day, without a preliminary conference between the air observation and the artillery will be carried out by all divisions. The result of the shoot will be forwarded to Corps Headquarters with the evening report by the 268th Reconnaissance Flight. If, in spite of favorable weather, no shoot has been carried out, the reason will be stated."

The document, in addition, contains instructions for courses for infantry and artillery officers and other ranks at the airdrome of the 268th Reconnaissance Flight at Dorignies (near Douai), and also lays down that periodical practice attacks with the co-operation of aircraft are to be carried out.

## INFORMATION RECEIVED FROM MILITARY INFORMATION SECTION, ETAT MAJOR, SEPTEMBER 23, 1918

The following anti-aircraft defenses are reported :

BLAMONT (23 klm. E. of Luneville.) Two guns are placed in the Simonin tower 500 m. N. W. of the church.

FREMONVILLE (2 klm. 500 E. of Blamont.) Four 105 mm. guns are located 300 m. N. E. of the Saint-Jean farm. Two guns believed to be 105 mm. are placed on revolving platform 800 m. S. of the river and 300 m. W. of the Fremonville-Harboucy road.

## OPERATIONS

Pursuit squadrons performed patrols and had several combats.

Night reconnaissance flight (3 planes) made a reconnaissance. Verdun-Stenay-Baumont-Maulin-Montmedy-Damvillers-Jametz-Marville-Longuyon-Bancourt-Dommery-Baroncourt-Conflans.

Army Group made reconnaissance Etain-Briey-Longuyon-Mousay-Bayonville-Varennnes

3 Enemy planes were shot down.

3 of our planes are missing



# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### ARGONNE-MOSELLE REGION.

1st Pursuit (Richthofen) Squadron. . . . . Prisoner's statement, American source, In Combles-Noyon region, Aug. 27  
ron. . . . . Sept. 12. Conflans area . . . . . 1918.  
(4th, 6th, 10th and 11th Flights).

NOTE.—The above squadron probably occupied the Giraumont, Labry, Batilly or Doncourt airdromes, as these airdromes have been occupied since September 10, 1918.

## AIRDROMES

### MOSELLE-VOSGES REGION.

	Present accommodation :		
	Hangars.	Sheds.	Capacity.
1. <i>Changes in existing airdromes : —</i>			
6. Buhl. . . . .	36	6	109
3 hangars have been removed from the east side of the airdrome, where hangars are close together, and 3 new ones have been constructed on west side of airdrome, 125 meters apart, since 15-9-18. British photo 25-9-18.			

## 1ST PURSUIT (RICHTHOFFEN) SQUADRON

Our reports show that the 1st Pursuit Squadron, consisting of the 4th, 6th 10th, and 11th Pursuit Flights, formerly commanded by Capt. von Richthofen, and later by Capt. Reinhardt, is the most prominent German Squadron on the Western Front.

The following aviators are now, or have been, numbered among the personnel of this squadron : Capt. von Richthofen, 81 victories ; Lt. Udet, 60 victories ; Lt. Lowenhardt, 53 victories ; Lt. Richthofen, 40 victories ; Sergeant-Major Thom, 29 victories ; Lt. Wusthoff, 27 victories ; Lt. Kleine, 22 victories ; Capt. Reinhardt, 20 victories ; Captains Richthofen and Reinhardt, and Lt. Lowenhardt have now been killed ; Lt. Wusthoff has been captured, and Lts. von Richthofen and Kleine are reported temporarily out of action on account of wounds.

From latest information obtainable, the squadron was reported to be equipped with Fokker biplanes in May 1918. Losses in machines seem to be made good immediately with the best machines obtainable.

This squadron seems to have taken part in the fighting wherever the Germans or Allies have started in offensive, and its transfer to the Conflans area would appear to indicate that this sector is now regarded as an active one by the enemy.

## ENEMY AERIAL ACTIVITY

On September 26th, Pursuit planes inactive in the early hours. Later activity increased considerably. Planes were aggressive making frequent attacks on our balloons and reconnaissance and bombing planes. Activity greatest in battle area and East of Verdun.

Very few reconnaissance missions. One deep reconnaissance Revigny—Saint-Dizier—Bar-le-Duc.

Numerous reglages in battle area and Wœuvre.

Many balloons up.

Saint-Mihiel bombed night of September 26-27.

## REGULATIONS FOR THE SERVICE OF INTERPRETATION OF AIRPLANE PHOTOGRAPHS

TRANSLATION OF A GERMAN DOCUMENT : FROM FRENCH VTH ARMY BULLETIN, SEPTEMBER 3, 1918  
XVIII<sup>TH</sup> ARMY.  
1A/B No. 1346.

ARMY HEADQUARTERS, JUNE 26, 1918.

COPY OF G. H. Q., MEMORANDUM Ic/II, 89642.

In order to insure that photographs taken by aviators and balloons will be systematically and quickly put to practical, tactical use, it is directed that the following regulations be followed out.

1. ARMY CORPS.—The photograph officer of the Army Corps makes tactical use of the photographs according to instructions from the staff officer in charge of that service and maintains a close liaison with the Headquarters Photographic Section. He superintends the careful distribution of the photographs within the Army Corps.

2. DIVISION.—In each division a photographic section will be attached to the topographical section. The direction will be intrusted to an officer of the Headquarters Staff, the Divisional Liaison Officer, or the Chief of the Divisional Topographical Section. This officer, responsible to the Chief of Staff, has charge of the distribution of the photographs to the headquarters of the infantry, the artillery, and special arms of the service, as well as the transmission to the Corps Photographic Section of the desires of the troop units relative to the taking and distribution of the photographs.

3. TROOP UNITS.—(a) In each divisional artillery headquarters, infantry brigade, and regiment, and in each artillery group, the commanding officer will assign to one of the officers of his staff the duties of troop photograph officer (Truppenbildoffizier). The latter will take care of and distribute the photographs and give to the divisional photographic section suggestion for taking photographs.

(b) At the headquarters of each first-line battalion and each artillery subgroup an officer will be designated to take charge of the photographic service (Offizier vom Bilddienst), who will take care of the photographs intrusted to his unit. In the battalions this service will devolve upon the trench officer

(Graben-Offizier) ; in the artillery sub-groups upon the liaison officer. He will be responsible for the transmission of photographs to the proper parties, will assist the Truppenoffizier and transmit to him the request of the troops.

The Truppenoffizier as well as the Offizier vom Bilddienst, will exercise these functions in addition to their regular duties. The short distance from the corps photographic section permits them to keep in touch with what is expected of them.

The general instructions on the intelligence service as related to photographs will be distributed in the near future.

For the General Commanding the Army:

Chief of Staff :  
Signed) VON SAUBERZWEIG,  
Major General.

#### **BOMBING SCHOOL AT FRANKFORT a. d. ODER**

FROM A PRISONER'S STATEMENT. BRITISH SOURCE.

The inhabitants of Frankfort a. d. Oder have sent a petition to the Kaiser requesting that the bombing school, at present situated there, should be removed.

Some time ago, an observer pupil, who thought that his machine was side slipping and was going to crash, released two 50-kilo bombs, one of which fell in front of a moving goods train, blowing up the train, killing four people, and doing serious damage to the permanent way.

#### **TRAINING OF BAVARIAN AVIATION PERSONNEL**

FROM A PRISONER'S STATEMENT. FROM THE BRITISH.

There are two training Squadrons (Feas) in Bavaria, the 1st at Schleissheim and the 2nd at Furth.

There are also several Military Flying Schools (Militär Fliegerschulen), which differ from the Feas only in that they train solely pilots and do not have Werftkompanien for the instruction of mechanics.

The following is the procedure in the case of civilians entering the 1st Fea at Schleissheim :—

Pupils are sent to the Rekrutenkompanie at Milbertshofen, where they go through a course of infantry drill lasting 4-5 weeks. They are then given 4-6 weeks theoretical training at the Motor Schule at Milbertshofen (south of Schleissheim) ; this school is part of the Fea, and corresponds to the Varrartsschule in a non-Bavarian Fea.

Instruction in flying is given at Schleissheim and is divided into 6 courses :—

6th Course.—About 40 flights on Albatros "B" machines fitted with dual control. Length of course, 5 weeks.

5th Course.—Includes the first examination. Flying on "B" machines not fitted with dual control. Length of course, 4 weeks.

4th Course.—Includes the 2nd Examination. Flying on "B" machines. Length of course, 3 weeks.

3rd Course.—Preparation for the 3rd Examination. Flying on "B" machines. Length of course, 3 weeks.

2nd Course.—Includes the 3rd Examination. Flying on "C" machines of the Albatros (C. 1 and C. 3) and Rumpler (C. 1 and C. 2) types. Length of course, 3 weeks.

1st Course.—Flying in modern "C" machines, and in some cases, on singleseaters. The length of time spent on this course depends on the demand for pilots at the front.

The number of pupil pilots in training at each Fea and Militär Fliegerschule is usually about 80. The number of instructors at Schleissheim is 9. The details of training at the 2nd Fea are similar to those at the 1st Fea.

#### **OPERATIONS**

On September 26, Pursuit planes extremely active performing not only patrols but reconnaissance missions. Many combats.

Army reconnaissance group performed 9 reconnaissance and 5 photographic missions all through enemy back areas.

108 photographs taken.

4,000 kilograms of bombs were dropped on Southern part of DUN.

2,200 kilograms of bombs were dropped at ETAIN. 2 in the town and one cutting the railroad.

Service rendered by our air squadrons was excellent throughout the day. The air reconnaissances enabled Headquarters to be constantly informed of our positions and those of the enemy,

5 airplanes are reported missing.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

VIMY-COMBLES REGION.		
239th Reconnaissance Flight.	Document, R. A. F., Sept. 5.....	In Rheims-Argonne region, July 9.
NOYON-RHEIMS REGION.		
247th Reconnaissance Flight.	Document, R. A. F., Aug. 18.....	In Rheims-Argonne region, Aug. 13.
RHEIMS-ARGONNE REGION.		
28th Battle Flight.....	Document R. A. F., Sept. 7 .....	In Noyon-Rheims region, June 28.
(See late identifications below).		

## IDENTIFICATIONS

ARGONNE-MOSELLE REGION.		
31st Reconnaissance Flight..	Prisoner's statement. At Doncourt-les-Confians, Sept. 20, 1918.....	Identified at Marimbois, same region, August 27, 1918.
39th Reconnaissance Flight..	Prisoner's statement. At Doncourt-les-Confians, Sept. 20, 1918.....	Identified in Thiaucourt area, same region, August 27, 1918.

## AIRDROMES

ARGONNE-MOSELLE REGION.			
1. <i>Changes in existing airdromes:—</i>	Present accommodation :		
	Hangars.	Sheds.	Capacity.
32. Ozerailles (now occupied. British photo.).....	3	0	6

## GERMAN AIRDROME ACCOMMODATION FROM ARGONNE TO SWISS BORDER

SEPTEMBER 21, AND SEPTEMBER 28, 1918

Region.	Airdromes.		Hangars.		Sheds.		Capacity.	
	Sept. 21.	Sept. 28.	Sept. 21.	Sept. 28.	Sept. 21.	Sept. 28.	Sept. 21.	Sept. 28
Argonne-Moselle.....	40	40	269	267	67	70	954	961
Moselle-Vosges .....	39	39	239	239	78	78	1133	1133
Vosges-Switzerland.....	32	33	265	267	100	102	1342	1353
	111	112	773	773	245	250	3430	3447

## DISTRIBUTION OF IDENTIFIED GERMAN AIR UNITS FOR WEEKS ENDING SEPTEMBER 21 AND 28

Region.	Pursuit		Reconnaissance		Protective.		Bombing.	
	Sept. 21.	Sept. 28.	Sept. 21.	Sept. 28.	Sept. 21.	Sept. 28.	Sept. 21.	Sept. 28
Flanders. ....	7	7	8	8	3	3	6	6
Lys-Vimy. ....	9	9	20	22	2	2	3	6
Vimy-Combles .....	13	13	13	14	2	2	0	3
Combles-Noyon .....	14	9	23	22	11	10	9	6
Noyon-Rheims .....	13	13	38	40	10	9	3	3
Rheims-Argonne .....	12	10	12	10	7	9	3	0
Argonne-Moselle.....	5	12	12	12	6	6	..	..
Moselle-Vosges .....	4	4	10	9	..	..	3	3
Vosges-Switzerland.....	4	4	9	9	..	..	..	..
Exterior Fronts .....	2	2	17	16	..	..	..	..
Unlocated .....	2	2	1	1	0	1	..	..
Total .....	85	85	163	163	41	42	27	27

Total identified flights (all classes) on all front for week ending Sept. 28..... 243  
Total estimated machines belonging to such flights ..... 2,961

## ENEMY AERIAL ACTIVITY

During September 27, moderate activity on the part of the enemy's pursuit planes throughout our sector. Reconnaissance planes inactive.

SAINT-MIHIEL bombed during night.

## NEW TYPE OF PFALZ SCOUT

FROM SUMMARY OF AIR INTELLIGENCE, R. A. F., SEPTEMBER 22, 1918.

A new type of Pfalz Scout, the D.12 was brought down in aerial combat near Dury on the 15th September. This was a single-seater biplane, with two pairs of struts on either side of the fuselage. These struts are splayed out from the vertical, and resemble those of the Fokker biplane. There is no dihedral in the planes, but the top plane has a slight extension, with balanced ailerons ; there is a forward stagger.

The tailplane is fixed, and is not externally braced, the construction being very strong. The rudder and elevators are partially balanced.

The following are some of the principal dimensions :—

Span of top plane .....	28 feet 7 inches
Chord of top plane .....	4 " 7 1/2 "
Span of bottom planes (each). ....	12 " 0 "
Chord of bottom planes.....	4 " 7 1/2 "

The engine is 180 h. p. Mercedes. The radiator is nose-type made of vertical tubes, and radiused off to make a streamline body, Baffle-plates, which can be controlled from the pilot's cockpit, are fitted on each side of the radiator to regulate the amount of air flowing through the tubes.

Two guns are fitted, firing forward.

A parachute was found in the machine. This was in a case and acted as the pilot's cushion.

The existence of the Pfalz Scout D.12 had been previously reported by prisoners (vide *Summaries of Air Intelligence*, Nos. 188 (27-8-18) and 157 (27-7-18)).

## GERMAN REGULATION ABOUT THE PURSUIT AVIATION

(FROM THE FRENCH)

The instruction about the engagement of the Squadrons of the Pursuit Aviation recently fell into our hands, it is dated from October 25, 1917, and it constitutes the 13th part of the prescriptions relative to the War of Positions and concerning all the branches of the service. This regulation chiefly includes principles and generalities; the most important prescriptions have been resumed hereafter.

**ROLE OF PURSUIT AVIATION.**—Only the losses inflicted to the enemy by the destruction, in aerial flights of numerous machines, confer him the feeling of his inferiority in the air.

The pursuit aviator can only get that result by acting offensively; the difficulty of protecting their rear generally forces them to fly in groups (3 or 4 machines).

The most important work of the aviators of the pursuit squadrons is the destruction, by means of constantly repeated raids beyond the lines of the reglage machines working behind the adverse lines and so they "blind" the hostile artillery. The results of the watch service of the enemy wireless will be used for a good part for determining the time and the direction of these attacks.

The attacks against the kite balloons reach their greatest efficiency when methodically executed, a few minutes before our attack or during the hostile attack, by grouped squadrons working against whole groups of balloons, and when, at the same time, the balloons are impeded from getting down prematurely to the ground by a big gun's fire with a flat trajectory, directed against their point of ascension.

It is of absolutely no use, to adjoin only one pursuit machine to a group of observation or reconnaissance machines, in order to secure their immediate protection against the hostile pursuit airmen. It is convenient to work in chains, swarms (2 or 3 chains), or even whole squadrons.

**ENGAGEMENT OF THE PURSUIT AVIATION.**—Before the battle the work will have to be done, as long as possible, by isolated "chains"; then the necessity of concealing to the hostile aerial observation our attack preparations will require a progressively increasing offensive activity and the entering into action of important formation which can reach the effective strength of a squadron.

The great flight, either defensive or offensive, requires the simultaneous engagement of numerous pursuit squadrons, to insure the aerial supremacy, or to force it away from the enemy; these squadrons will only reach their greatest efficiency if their general management is committed to a single chief. Consequently, the squadrons will be grouped into pursuit "escadres" (groups) (permanent formations allowing 3 or 4 squadrons, which are to be always kept together) or into pursuit groups (temporary formations allowing a variable number of squadrons).

## THE COMMANDING OFFICER OF A SQUADRON, GROUP, OR "ESCADRE"

Then the instruction enumerates the qualities required from the Commanding Officer of a Pursuit Formation.

The Chief of a squadron is responsible for the instruction and the keenness of his unit. He keeps it constantly advised of the tactical situation of the atmospherical conditions, determines the targets and the attack formations.

The commanding officer of a pursuit group regulates the engagement of his squadrons by concise orders, and accordingly to the instructions he would have received from the army (or from the A. C.) through the medium of the commanding officer of the aviation of the Army (or of the A. C.). He remains in the most intimate connection with the other commanding officers of pursuit groups or "escadres".

He keeps himself constantly advised of the hostile aerial activity by studying the statements of the A. A. A., of the balloons, of the pursuit squadrons, of the watch posts of the hostile wireless, and by his personal observations made from the outlook posts of the A. A. A.

The grounds of the squadrons belonging to the same group must be very close to the other; in the vicinity of these stationary grounds, in quiet sectors, other temporary grounds must be prepared beforehand for the use of reinforcement squadrons that might be brought later on.

The commanding officer of a pursuit "escadre" has the command of his unit not only on the ground, but also in the air; he brings at the same time his whole "escadre" on the battle field, arranges it in good order, draws it up in echelons at different altitudes, determines the targets, and insures its cohesion by the concision of his orders. Owing to its superior instruction and cohesion, the pursuit "escadre" is much better fit than the pursuit group for a combined engagement, and may be considered the most powerful instrument and the most qualified for securing the aerial supremacy.

By Order,  
The Chief of Staff :  
(Signed) J. MASSELIN.

## OPERATIONS

September 27. In spite of low clouds our pursuit squadrons flew over the front lines shortly after daylight. Patrols were kept up throughout the day. Observation plans very active, generally operating at low altitudes; reconnaissance missions were carried out.

2,700 kilograms of bombs were dropped on Etain.

8 enemy planes confirmed as brought down. Others brought down beyond enemy lines, unconfirmed.

4 of our planes are missing.

6 enemy balloons destroyed.

# SUMMARY OF AIR INFORMATION

## AIRDROMES

### ARGONNE-MOSELLE REGION.

	Changes in accommodation :			Present accommodation :		
	Hangars.	Sheds.	Capacity.	Hangars.	Sheds.	Capacity.
1. <i>Changes in existing airdrome : —</i>						
32. Ozerailles .....	+ 3	..	+ 6	6	..	12
Increase since 28-5-18. New occupied. British photo. 26-9-18.						
2. <i>Photograph of the following airdrome shows no change : —</i>						
57. Stenay .....	..	..	..	17	1	46
U. S. photo 26-9-18. Complete airdrome not shown.						

## ANTI-AIRCRAFT DEFENSES

REPORTED BY THE FRENCH, SEPTEMBER 23-24.

SENONES. Several machine guns at the station. Three machine guns between the cemetery and the hospital. Three machine guns (two of which are walled in) near the barracks of the Chasseurs. Two machine guns placed on a turning pivot and hidden by foliage N. W. of the dwelling houses on the Saint-Simeon farm (500 m. S. of the church). Two machine guns near the chalets serving as the officers' casino, at the foot of the slope of La Roche Mere Henry (1,500 m. N. N. W. of Senones). A machine gun at the top of this rock.

LE MONT (4 klm. N. E. of Senones). A battery of 105's is located 300 m. S. of the village near the road leading to Belval.

SAINT STAIL (7 klm. E. S. E. of Senones). Three anti-aircraft guns were placed at Le Palais (Hill 780 2 klm. 300 E. N. E. of Saint-Stail).

FREMONVILLE (2 km. 500 E. of Blamont). Two anti-aircraft machine guns in concreted emplacements are installed in the old tile factory, situated in the Western outskirts of Fremonville on the road to Blamont. One machine gun placed in the garden of Mr. Jacquot at the Southern exit of Fremonville, on the Harbouey road. Four machine guns on the side of the Fremonville road near the Saint-Jean farm (500 m. S. of the railroad). One machine gun, concrete emplacement, at the South-eastern exit of Fremonville on the Cirey road. Several machine guns in concrete emplacements scattered throughout the Western and South-western end of the town. A reinforced emplacement, 10 m. square, with the exit towards the North and a loop-hole towards the South, is located 200 m. S. S. E. of the church.

## ENEMY AERIAL ACTIVITY, SEPTEMBER 28

Enemy aviation very inactive during the day. Early in the morning a few formations consisting of six or seven planes were seen along the battle front well within the enemy's lines. There were no reconnaissance planes observed during the day. During the morning, at about 9 o'clock, a part of our front line and the town of Cuisy were bombed and machine gunned by enemy planes. Hostile balloons were generally inactive.

## TRAINING OF GERMAN AVIATORS

(FROM A RELIABLE SOURCE)

The approximate number of personnel under flying training is 4,000 every six months. From this number about 30 % have to be deducted for crashing, diseases, etc.

Only machines of Type "B" of the following make are used up to the second examination:—Albatros-Aviatik—A.E.G.—Germania—Gotha—Halberstadt—Hansa Brandenburgische—D.F.W.—L.V.G.—Merkur—N.F.W.—Rumpler.

Machines of Type "B" are fitted with a 100 or 120 H. P. engine. Men under training for the second examination very seldom fly more than one type of machine.

After having passed the second examination, the following machines of "C" type are used:—(Personnel is under orders to fly as many different types of machines as possible.)

Albatros .....	Type C. I-C. XII	260HP Mercedes.
Aviatik .....	C. I .....	260HP Benz.
D.F.W. ....	" C. I .....	200HP Benz.
L.V.G. ....	" C. I-C. V..	200HP Benz.
Rumpler .....	" C. I .....	200HP Benz.
A.E.G. ....	" C. I .....	180HP Opel Argus.
Gotha .....	" C. I .....	160HP Mercedes.
Halberstadt .....	" B and C...	160HP Mercedes.
Hannoversche .....	" C. ....	180HP Opel Argus.
N.F.W., Rumpler, Lizenz .....	" C. I .....	160HP Mercedes.
Roland-Walfische .....	.....	160HP Mercedes.
Fokker old two-seaters with rotation engine.		

After having passed their third examination, the following types of single-seaters (scouts) are at the pilots' disposal :

Albatros .....	Type D. I-D. III.	160HP Mercedes,
Fokker monoplane, and biplane .....	Type D. I-D. V...	

Halberstadter Single Seaters .....	120HP Argus.
Roland Haifisch .....	180HP Opel Argus.
Old Pfalz Single Seaters.	

A small number of pilots is sent to Squadron schools for special training in squadron flying on two-seaters and bi-motor bombers.

A standard type of training machine does not exist. It is emphasized that after having passed the second examination, pilots are under orders to fly as many different types of machines as possible.

Service types which have become insufficient for the front, are sent to training schools at home, where they are flown by pilots who have passed their second examination.

A special training with troops does not exist. After having completed their training at home, pilots are sent to airdromes behind the battle area, where they are trained in landing, air fighting and sometimes squadron flying. Duration of training at these airdromes is subjected to activity at the front.

Pilots for new formations do not undergo special training.

The formation of new squadrons takes place in accordance with demand.

The following flights consist of 6 machines each:—

Artillery flights.  
 Infantry       "  
 Protecting     "  
 Battle         "

Pursuing flights consist of 12 machines each.

In 1917, a bombing squadron (K. G. O. H. L.) consisted of 6 flights with 6 machines each, a total of 36 machines, of which 18 were bi-motor bombers.

Eight to twelve weeks are devoted to aerial gunnery. Training is given in three sections:—

- (a) Firing on a range.
- (b) Firing from the ground in propeller wind.
- (c) Firing during flight at fixed targets.

During bad flying weather several schools practice firing at fixed targets from fast traveling motor cars.

Firing at towed targets is not practiced.

#### AERIAL PROTECTION OFFICERS

FROM HEADQUARTERS, R. A. F., SEPTEMBER 27, 1918

Aerial protection officers (Luftschutzzoffiziere or L. S. O.) are allotted to Armies, with a view to keeping constant watch on the Allied aerial activity and to their strength as compared with that of the Germans.

It is the duty of these officers to forward detailed reports to divisions, giving all particulars of aerial activity, including balloons.

Demands for the employment of fighting machines, in order to engage especially effective artillery aeroplanes, are to be forwarded by troops to Divisions, which will report all necessary details to the aerial protection officers; the latter are in direct communication with commanders of pursuit units, who are responsible for taking action according to the resources available.

NOTE.—The above system appears to have the disadvantage of being too slow for any results of value to be obtained.

#### OPERATIONS

Our pursuit planes were very active during the day, engaging in a number of combats. The air service gives a total of 52 combats, and—brought down or destroyed—33 enemy planes, 6 of which are confirmed, without loss on our part of a single pilot.

During the afternoon the pursuit planes engaged in a bombing expedition, dropping bombs on the towns of ROMAGNE, CUNEL and at other points immediately in rear of the enemy's front line.

Four observation units carried out numerous low flying reconnaissances identifying our front line and locating important targets.

The First Army Observation Group made several very important reconnaissance missions in the enemy's rear line over the region of BOUIERES, DUN, MONTMEDY, LONGUYON, BREUILLE, METZ. Most of these missions were executed at a very low altitude.

Our balloons were active whenever the weather permitted







# SUMMARY OF AIR INFORMATION

*SECOND SECTION, GENERAL STAFF  
GENERAL HEADQUARTERS  
AMERICAN EXPEDITIONARY FORCES*

**OCTOBER-NOVEMBER 1918**

**NUMBERS**

**61 TO 103**

**INCLUSIVE**

**NOTE :**

In this re-print of the Intelligence Summaries in order to retain the original form in which they were published and that the reference numbers may be utilized, no attempt has been made to re-number the issues. The Summaries may be traced by the date of publication.



SUMMARY OF AIR INFORMATION

CHANGES IN LOCATION OF UNITS

COMBLES-NOYON REGION.

17th Reconnaissance Flight .. Document, R. A. F., Sept. 7..... In Noyon-Rheims region, Aug. 17.

IDENTIFICATIONS

VOSGES-SWITZERLAND REGION.

10th Reconnaissance Flight .. Document, British source, Sept. 2..... At Schlestadt N. At same place June 8, 1918.  
43rd Reconnaissance Flight .. Document, British source, Sept. 2..... At Schlestadt S. At same place, June 8, 1918.

ENEMY AERIAL ACTIVITY

September 29th : Only slight activity on the part of hostile pursuit planes. A few enemy planes engaged in regulage over battle areas late in the day. Hostile balloons active in afternoon.

GERMAN AEROPLANES

FROM SUMMARY OF AIR INTELLIGENCE, R. A. F., SEPT. 28TH, 1918.

A captured notebook, containing a list of enemy and allied machines, shows that a new type of Albatros two-seater has been produced ; this is the C.15 type of machine no further information is at present available.

Mention is also made of an Albatros and a Rumpler twin-engine bomber. Vague reports were received some time ago regarding a new Rumpler twin-engine aeroplane, and an old type twin-engine machine produced by the Rumpler works was known to be in use for training purposes ; an Albatros aeroplane of this type had not been in use for some considerable time.

From the fact that other machines mentioned in this list are modern, it appears probable that new type Rumpler and Albatros bombers are in use, but further confirmation is required.

NEW TWO-SEATER

An L. V. G. C. 6 landed intact in our lines on 24/9/18. The general outline of this type is very similar to that of the L. V. G. C. 5., but in the new type the fuselage has been deepened, the observer's cockpit raised and the top plane lowered permitting the observer to fire more effectively over the top plane, thus materially increasing his field of fire. The trailing adges of the lower planes are well cut away at the fuselage to increase the pilot's view underneath. The radiator, instead of being placed on top of the leading edge of the upper plane as in the old type, is set into the center section of the top plane as in the Halberstadt and provided with a shutter for regulating the amount of cooling surface. The dimensions are slightly less than those of its predecessor ; span—43 ft., overall length—24 ft. 6 inches. It is furnished with a 220 h. p. Benz motor. The wings and tail planes are camouflaged according to the usual German practice, but the fuselage is varnished yellow and the rudder painted white. The usual armament of one fixed and one moveable machine gun is carried.

HOME DEFENSE FLIGHTS

FROM THE BRITISH.

Home Defense Flights are now known to be stationed at :—

Bitsch.....	Aerodrome No. 107.—Confirmed.
Boblingen .....	" No. 146 "
Bonn.....	" No. 134 "
Hangelar.....	" No. 115 "
Brand .....	" No. 96 "
Coblentz .....	" No. 133 "
Cologne .....	" No. 123 "
Crefeld .....	" No. 143 "
Dusseldorf and Ober-Cassel.....	" No. 140 "
Frankfurt-an-Main.....	" No. 118 "
Freiburg .....	" No. 2 "
Karlsruhe .....	" No. 65 "
Lahr .....	" No. 41 "
Mainz .....	" No. 5 "
Mannheim and Sandhofen.....	" No. 1 "
Morchingen .....	" No. 8 "
Neu-Breisach .....	" No. 23 "
Saarbrücken .....	" No. 3 "
Diest.....	Unconfirmed.
Dortmund .....	" "
Essen.....	" "
Holten.....	" "
Ludwigshafen .....	" "
Münster .....	" "
Offenburg .....	Aerodrome No. 40 "
Rotthausen .....	" "
Speyer.....	Aerodrome No. 113 "

The Headquarters of these units is situated at Frankfurt-am-Main.

The normal establishment of a Home Defense Flight is believed to be 12 to 15 machines of the following types :—

"Albatros" (D. 3)  
"Albatros" (D. 5)  
"Albatros" (D. 5a)

"Fokker" (D. 7)  
"Fokker" Triplanes.  
"Pfalz" (D. 3a).

It is however apparent that these flights are now being equipped with the latest types of fighting machines, thus, as soon as a new type of scout arrives at the front, its appearance must shortly be expected in the home defense flights.

Two-seaters of the "Halberstadt" type have frequently been met with during our raids into Germany and it is possible that a new type of home defense unit equipped with these machines has been formed. On the other hand the explanation of this may be that some of the newly formed battle flights are now stationed at the Alsace Lorraine and Verdun Sectors, for the purpose of assisting the home defense flights in their work.

A case is known (i. e., at Mannheim and Sandhofen) of a home defense flight being stationed half at one airdrome and half at another. Judging from the small number of machines (viz, about 6) reported to be stationed at some aerodromes known to be used for home defense purposes, this practice of dividing a flight between two aerodromes situated close to one another, would seem to be fairly common.

Two-seaters of the "Halberstadt", should read, Two-seater fighters of the "Halberstadt".

#### OPERATIONS

September 29. In spite of bad weather this morning our pursuit planes made numerous trips going to the front lines. In the afternoon the regular sector patrols at low and medium altitudes were again put into force.

In the course of these patrols they engaged in 15 combats and pilots believe they have destroyed 6 enemy planes.

In addition to this patrol work they protected our bombing planes on bombing expeditions.

Our observation planes did not go out in the morning on account of bad weather, but in the afternoon a considerable number of infantry and liaison patrols were carried out by the corps observation planes. Our army observation planes reconnoitered the area in the rear of the battle front.

Bombing planes successfully raided, Grandpre and Marcq. They dropped 1600 kilos of bombs on Grandpre and 1600 kilos on Marcq. At Grandpre four bursts were observed. Incendiary bombs landed on a dump S. of the town causing fires. At Marcq bursts were observed above a railroad shed and caused a fire in the town.

SUMMARY OF AIR INFORMATION

CHANGES IN LOCATION OF UNITS

RHEIMS-ARGONNE REGION.		
49th Pursuit Flight.....	Document, R. A. F., Aug. 20.....	In Lys-Vimy region, March 8, 1918 (Prussian Unit).
ARGONNE-MOSELLE REGION.		
29th Reconnaissance Flight. .	Machine down. American source, Sept. 24.	W. of Briey. In Noyon-Rheims region. Sept. 7, 1918.
NOTE.—Report that the 33rd Reconnaissance Flight was at Briey (Summary of Air Information No. 57) was incorrect. Prisoner of the 29th Reconnaissance Flight, when first captured, stated that he belonged to the 33rd Reconnaissance Flight, but later admitted it was the 29th Reconnaissance Flight to which he belonged and which was located at Briey. The 33rd Reconnaissance Flight was last identified in the Comble-Noyon region on August 3, 1918.		
VOSGES-SWITZERLAND REGION.		
70th Pursuit Flight. ....	Document, British source, September 2...	At Stotzheim. Last identified at Buhl (Moselle Vosges region) on Aug. 15.
INTERIOR.		
4-A Home Defense Flight.....	Document, R. A. F., Aug. 27.....	At Boblingen. Not previously identified.

IDENTIFICATIONS

VOSGES-SWITZERLAND REGION.		
Army Aircraft Park A.....	Document, British source, September 2..	At Strasbourg-Neudori. Identified same place in June, 1918.

AIRDROMES

ARGONNE-MOSELLE REGION.							
Changes in accommodation.				Present accommodation.			
	Hangars.	Sheds.	Capacity.	Hangars.	Sheds.	Capacity.	
1. <i>New airdromes.</i>							
119.	Mance . . . . .			3	..	6	
	8 klm N. W. of Briey.	Occupied.	French photo. 26-9-18.				
120.	Mairy. . . . .			4	..	8	
	3 klm N. W. of Briey.	Unoccupied.	French photo. 26-9-18.				
2. <i>Changes in existing airdrome.</i>							
58.	Briey N. . . . .	+8	+1	+20	13	1	30
	Increase since 25-8-18.	French photo. 26-9-18.					
MOSELLE-VOSGES REGION.							
1. <i>Changes in existing airdrome.</i>							
111.	Burlioncourt . . . . .	+2	..	+4	2	..	4
	French 8th Army airdrome list, Sept. 28, 1918.						
VOSGES-SWITZERLAND REGION.							
1. <i>Change in existing airdrome.</i>							
28.	Colmar S. . . . .	—6	+1	0	20	1	52
	Change since 2-9-18. French photo. 26-9-19.						
INTERIOR.							
1. <i>New airdrome.</i>							
118.	Frankfurt . . . . .	?	?	?	?	?	?
	Formerly reported airdrome 2146.						

HOME DEFENSE FLIGHTS

BRITISH SOURCE, SEPT. 24, 1918.

The 4-A Kest has been indentified at Boblingen. Previously the 4-B Kest had also been identified at Freiburg ; at the time of this latter identification, it was thought that a mistake had been made and that the report referred to the 4th Kest which had several times been reported at Freiburg. In view, however, of this recent information, it is probable that the 4th Kest has been divided up, one half (4A) being stationed at Boblingen and the other half (4B) at Freiburg.

ENEMY AERIAL ACTIVITY

September 30th, enemy aviation was very inactive throughout the day. There were a few planes in the region N. and W. of VERDUN. Slight activity of hostile balloons.

GERMAN AEROPLANES

FROM SUMMARY OF AIR INFORMATION, R. A. F., SEPTEMBER 29, 1918.

A prisoner states that a new type of Halberstadt two-seater, fitted with a 200 h. p. Benz engine, has passed its tests satisfactorily.

NOTE.—The CL. II and CL. IV type Halberstadt two-seaters, known to be in use at the front, are equipped with 180 h. p. Mercedes engines.

Another prisoner — captured by the French — states that his unit, a reconnaissance flight in Alsace, is partially equipped with Halberstadt two-seaters with Rapp engines.

NOTE.—As regards the latter, this engine is possibly of the same type as the 180 h. p. Bayern recently captured on a Fokker biplane (vide Summary of Air Intelligence, Serial No. 193, of 1-9-18). The Rapp and the Bayern works have amalgamated into one firm.

**INFORMATION RECEIVED FROM MILITARY INFORMATION SECTION ETAT MAJOR,  
SEPTEMBER 26, 1918**

The following anti-aircraft defenses are reported :

VIEUX MOULIN (1,500 m. E. of Senones). Anti-aircraft Gun located at "La Bigorne" (1,500 m. S. E.).

SAULXURE (5 klm 500 N. N. E. of Saales). Anti-aircraft gun on Hill 517.

**OPERATIONS**

September 30th. Although the weather was very unfavorable, our pursuit planes carried out a considerable number of patrols and reconnaissance missions during the day.

Our pursuit pilots report several combats during the day as a result of which our pilots are believed to have destroyed at least two enemy planes.

Corps Observation planes were also active. They carried out infantry and liaison patrols and number of visual missions.

No night reconnaissance missions.

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# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

LYS-VIMY REGION.  
52nd Pursuit Flight..... Document, R. A. F., Sept. 9..... In Vimy-Combles region, Aug. 8.  
ARGONNE-MOSELLE REGION.  
274th Reconnaissance Flight. Document, R. A. F., Sept. 6..... Stenay area. Reported in Noyon-Rheims region, Aug. 30, 1918.  
MOSELLE-VOSGES REGION.  
78th (Bav.) Pursuit Flight.... Document, R. A. F., Sept. 2..... At Buhl (Airdrome No. 6).

NOTE.—This flight was recently reported in Vimy-Combles region, but was probably incorrect, as it was previously at Buhl. Document shows this is an independent flight and not part of the 3rd Pursuit Squadron, as had been believed.

## IDENTIFICATIONS

MOSELLE-VOSGES REGION.  
281st (?) Reconnaissance Flight Document, R. A. F., Sept. 2..... At Lorquin (Airdrome No. 12). Identified (same place) in July, 1918.

NOTE.—Document did not state number of this flight, but the 281st Reconnaissance Flight is the only unit known to be at Lorquin.

VOSGES-SWITZERLAND REGION  
276th Reconnaissance Flight.. Document R. A. F., Sept. 2..... At Niedernai (Airdrome No 74) Identified at Altdford (same region) Aug. 8, 1918.

## AIRDROMES

ARGONNE-MOSELLE REGION.  
1. New airdrome.  
Present accommodation.  
Hangars. Sheds. Capacity.  
432. Boulton-aux-Bois..... 1 1 5  
(Formerly reported airdrome 2155, French photo, 16-8-18).

## ENEMY AERIAL ACTIVITY

October 1st: Enemy activity slightly increased over yesterday.

A number of pursuit planes seen all along the front.

At 18:30h 3 patrols, a total of 17 planes, probably Chasse planes were seen in the region W. of the MEUSE.

A few reconnaissance planes were reported in the region of the MOSELLE, E. of VERDUN.

No deep reconnaissance planes seen.

Hostile balloons rather inactive.

## AUSTRO-HUNGARIAN MACHINE GUN COMPANIES FOR AERIAL DEFENSE

RECEIVED FROM THE ROYAL ITALIAN ARMY-TRANSLATION OF GERMAN DOCUMENT.

The existence of a machine gun company for aerial defense ("Fliegerabwehr M. G. Komp'") has been ascertained from a postal address. The company has the Field Post 440 of the 7th Army Corps stationed near Motta di Livenza, near which is the well known aviation camp where the company might be serving. The existence of the company gives confirming evidence of the installing of machine gun companies whose efforts are exclusively devoted to anti-aircraft defense. The enemy document here given in full confirms the above.

### 42nd. INF

SUBJECT: *Formation of a Machine Gun Company For Anti-Aircraft Defense. Ref. No. 80618. Supreme Command.*

Feldpost 405, 16 Feb. 1918.

Anti-aircraft defense by means of machine guns is assuming a growing importance. In Germany there already exist groups of anti-aircraft machine guns (of 3 machine gun companies each, every company with 12 pieces, or 36 guns to the group).

As to us, owing to the unfavorable industrial conditions, it is impossible to think of forming a large number of these machine gun detachments for anti-aircraft defense (considering the necessity of keeping up the supply of machine guns in the infantry) but the Supreme Command considers it opportune to gather even now the data shown by experiences as to the efficiency of machineguns fire against aircraft.

Therefore the Supreme Command has asked the Ministry of War, to form as soon as possible, a machine gun company for anti-aircraft service (of two sections, each with 8 guns) supplying it with all the apparatus best perfected and most suitable for the purpose. (Special sights and equipment, Blasevich Sight adjuster, etc.)

The particular duties of this anti-aircraft machine gun company will be:

1. To gather experimental data on the efficiency of the machine gun in use against aircraft, sending reports to the Supreme Command.

2. To verify the exactness of data gathered on other fronts, ours or those of our adversaries. (Here follows a statement of the experiments of a machine gun company of the 42nd. Regiment, which may be summed up as follows).

(1) *Grouping the guns*: the best results were obtained by keeping all the 8 pieces (masked) in a radius of 100 paces.

(2) *Fire regulation and use of sight adjustment*: with the system indicated above, there is the possibility of operating the pieces under practically identical conditions. To give set rules in the use of the aim adjustment for the various pieces seems useless, because every chief-of-piece shoots according to his own method, and calculates in various ways the distance, velocity, and direction of the aeroplane, etc. An adjustment of 800 paces should generally be indicated for fire on aircraft flying at a distance up to 1000 paces, with an angle of elevation of more than 45°. For those flying-low at a distance of not more than 1500 paces, the aim adjustment is made according to the distance.

(3) *Emplacements*: The enemy aviation often flies low and tries to direct machine gun fire on the pieces in anti-aircraft emplacements; on that account it is advisable to sink the emplacements into the ground (the depth to vary according to the circumstances and according to the field of fire).

#### ENGAGEMENT OF LOW FLYING AEROPLANES WITH MACHINE GUN FIRE

(FROM THE EXPERIENCE OF BRITISH ANTI-AIRCRAFT DEFENSE GAINED BY GERMAN CONTACT PATROLS).

FROM SUMMARY OF AIR INTELLIGENCE, R. A. F., SEPTEMBER 30TH, 1918.

The following translation of a German document (date and origin unknown) shows, incidentally, that the enemy has suffered considerable losses owing to machine gun fire from the ground:—

ERRATA: The word "efficiency" in paragraph 3 and 4 of this page should read "efficacy".

"The most vulnerable points of the aeroplane are the engine, propeller and radiator; the most effective method of attacking it is when the aeroplane is approaching. By engaging the machine when it is flying away, the occupants offer the most favorable target. Allow the aeroplane to fly into the cone of fire; if the machine is travelling laterally, aim well in front. The existence of armored British aeroplanes has, so far, not been established anywhere. Ordinary S. A. ammunition will penetrate; armor piercing ammunition is not necessary. Small supplies of armor piercing ammunition have, however, been asked for from Army H. Q., in order to increase the penetrating power against the engine.

"The moral effect upon aviators of machine gun anti-aircraft fire, once they perceive the gun flashes and receive hits on non-vital parts of their machine, is considerable.

"The actual effect is far greater than the detachment which is firing is able to perceive. In the majority of cases, the damage inflicted compels the aeroplane to make for home immediately and to make a forced landing behind the lines.

"The losses in German contact machines in the Sixth German Army from the 9th to 30th April, due to machine gun fire from the ground amounted to 23 machines. The British achieved this in spite of very heavy fighting on the ground, chiefly against armored machines. As compared with this, our organized anti-aircraft defense must give a prospect of considerable success against the enemy's unarmored machines.

"The War Ministry offers a reward of 200 marks for every machine shot down out of action".

#### OPERATIONS

October 1st, 1918: Dense fog and low clouds rendered flying almost impossible during the morning.

In the afternoon our pursuit planes carried out the usual patrols and also furnished protection for our bombing squadrons which successfully bombed BANTHEVILLE, dropping 1240 kilos of bombs on the railroad tracks and town. Shortly before reaching the objective, this patrol encountered an enemy patrol of 8 Fokkers. A severe combat ensued at close range as a result of which it is believed that one enemy plane was destroyed. All these Fokkers were marked with red wings, red noses and blue tails.

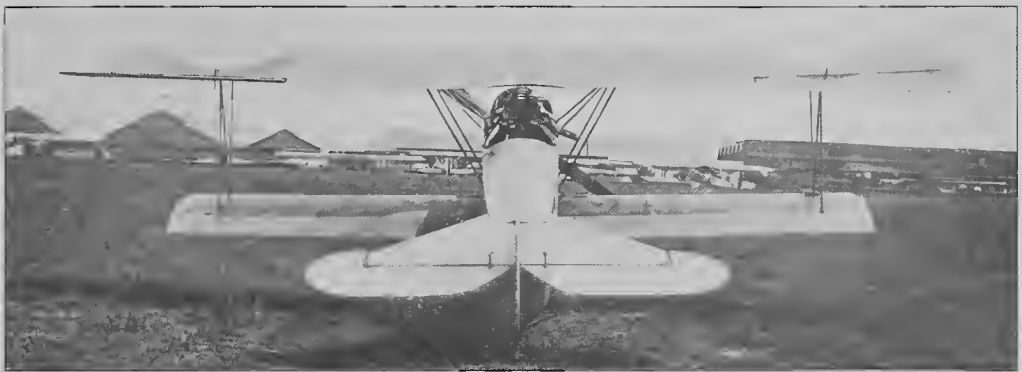
Our Corps Observation planes maintained liaison with the front line. Also carried out a number of successful photographic mission.

A considerable number of reconnaissance missions were also executed for the Corps Sectors, all of which brought back important information.

Two photographic missions executed by Army Observation Group-over the region GRANDPRE to BREUILLES.

Our balloons were active when weather conditions permitted.





**FOKKER BIPLANE SCOUT  
TYPE D 7**



# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

Nil.

## IDENTIFICATIONS

Nil.

## AIRDROMES

Nil.

## ENEMY AERIAL ACTIVITY

Enemy aviation was more active than on the preceding days. Quite a few pursuit planes were observed in the battle area in the region E of the MEUSE and in the WOEVRE. A number of planes also reported registering artillery fire in these areas, as well as in the region in W. MOSELLE. Only slight activity on the part of reconnaissance planes.

Hostile balloons were active.

## PHOTOGRAPHS OF GERMAN PLANES

A series of descriptions of different German planes will be published in the SUMMARY OF AIR INFORMATION accompanied by photographs. Below is the first one of the series. These descriptions will be published about every third day.

### FOKKER BIPLANE SCOUT

TYPE D 7.

Maximum Spread :—29 ft.

Overall Length :—23 ft.

Total Main Plane Area :—240 sq. ft.

Wing Shape :—Wings are practically rectangular in plan but balancers of ailerons on top plane protrude beyond wing tips like in Fokker triplane. There is a heavy stagger. Lower plane is much smaller than upper. No sweepback and slight dihedral. There is a very small plane on the axle of the landing gears. There are no external bracing wire and one set of "N" shaped interplane struts on each side of fuselage.

Ailerons :—On top plane only and balanced. Very similar to those of Fokker triplane.

Rudder :—Of unusual shape and is balanced, overhanging the fin.

Elevators and Tail Plane :—Similar in shape to those of Fokker triplane.

Fuselage :—Of square section. The motor is set low and entirely covered with a hood. The radiator is in the nose of the fuselage.

Engine :—180 HP. Mercedes of new model.

Armament :—2 Spandau guns synchronized and firing through the propeller.

Weight :—Empty 1540 lbs.

Load 396 —

Total 1936 —

Performance :—Climbs to 10,000 ft. in 14 min., to 15,000 ft. in 30 min. Speed at 10,000 ft. 105 miles per hour, at 15,000 ft., 93 miles per hour. Its maneuvering qualities are very good and it is very easy to handle.

## OPERATIONS

OCTOBER 2ND, 1918.—Improved weather conditions during the morning were taken advantage of by our army reconnaissance planes who executed several reconnaissance missions over the enemy's rear areas.

During the night our night-flying planes reconnoitred the region between FRESNES, ETAIN and AZANNES and DAMVILLERS.

Our bombing planes dropped a considerable amount of bombs on St. JUVIN and CORNEY. British and French bombing planes were also active raiding important railway centres and airdromes in the enemy's territory.

Our pursuit planes were out early in the morning and patrolled the sector throughout the day. In the late afternoon one of our patrols encountered a Halberstadt biplane over MONTFAUCON. Our pilots, by very skillful maneuvering, cut this enemy plane off from retreating to his own lines, forcing it southward to a point a few kilometers N. of SOUILLY where they finally brought it down in flames from an altitude of about 20 meters. This plane was too badly burnt to be examined.

At 18 o'clock, 6 enemy planes were attacked by American planes near NIXEVILLE, about 12 km. W. of VERDUN. One of these planes was brought down and the two occupants were captured unhurt.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### RHEIMS-ARGONNE REGION.

3rd Battle Flight.....	Rethel, Oct. 3. Pris. statement, American source; machine down near Very....	In Combles-Noyon region, Aug. 23, 1918.
9th Pursuit Flight.....	Champagne (unlocated). Sept. 26, source R. A. F. ....	In Noyon-Rheims Region, Sept. 2, 1918.
47th Pursuit Flight.....	St. Marie. Sept. 26. Pris. statement, R. A. F. ....	Last identified in Combles-Noyon region, June 26, 1918.
50th Pursuit Flight.....	Leffincourt. Sept. 25. Pris. statement, R. A. F. ....	In Noyon-Rheims region, Sept. 2, 1918.
60th Pursuit Flight.....	Mars-sous-Bourcq. Sept. 25. Pris. statement, R. A. F. ....	Identified N. of Rheims (same region), June 17, 1918.
81st Pursuit Flight.....	With 3rd German Army. Sept. 25. Pris. statement R. A. F. ....	Last identified in Noyon-Rheims region, Sept. 2, 1918.

### ARGONNE-MOSELLE REGION.

21st Battle Flight. ....	Stenay. Oct., 2. Pris. statement, American source .....	Last identified with 7th German Army, July 28, 1918.
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NOTE.—Prisoner states that this flight was in Flanders in March, 1918, moving to the Rheims area in June. From there is moved to the Metz area in August and then to Stenay on Sept. 28, 1918.

## IDENTIFICATIONS

### ARGONNE-MOSELLE REGION.

274th Reconnaissance Flight..	Stenay, Sept. 29. Document, R. A. F.	Identified in same area Sept. 6, 1918.
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## AIRDROMES

NIL

## 5th PURSUIT GROUP

FROM R. A. F. SUMMARY OF AIR INTELLIGENCE, OCT. 2, 1918.

Identifications obtained by the French show that the 60th and 81st Pursuit Flights, belonging to the above group, have been transferred from the Aisne to the Champagne front. The 50th Pursuit Flight, which it was thought belongs to this group, has also been so transferred.

The remaining flights in this formation are the 9th, 21st (Saxon), 41st, 45th and 66th of which the 9th is stated to have left its airdrome in the Laon sector; it is accepted as now being in Champagne.

As regards the other 4 flights (i. e., 21st, 41st, 45th and 66th), these may possibly also have been moved, but as a group is not a permanent formation, further confirmation is required before their transfer is definitely accepted.

It is not known whether the 5th Group Headquarters have gone to the Champagne battle front, and information on this point would be of value.

## ENEMY AERIAL ACTIVITY

Only moderate activity of enemy aviation E. of the MEUSE and on the right of our sector. In the region W. of the MEUSE hostile planes showed greater activity, in the afternoon when they bombed and machine-gunned our front areas.

A number of reconnaissance and reglage planes were seen, but no deep reconnaissance flights were reported.

Hostile balloons were active.

## DEVELOPMENT OF GERMAN AVIATION

TRANSLATION OF GERMAN DOCUMENT RECEIVED FROM FRENCH G. Q. G.

During last winter the Germans devoted all their efforts toward the creation of new pursuit squadrons and supplying battle squadrons with new aeroplanes: Haberstadt and Hanover. But, since the end of February, their materiel for pursuit planes was found insufficient; the Albatros D.III and D.V were considered antiquated; the new Pfalz D. III machines and Fokker triplanes were not satisfactory. As a result of conferences and tests at Aldershof (near Berlin), a new aeroplane, the Fokker D. VII, was found superior to the aeroplanes already known and its manufacture was begun immediately.

The slackening of manufacture due to the change in construction, the transformation of the existing materiel and the replacement of the heavy losses suffered by the enemy aviation from the first days of the March offensive created a crisis in aviation.

The strength of the Jagdstaffeln rapidly decreased; the replacement of worn out materiel was low.

At the present time, the increased production from the war factories would permit of the replacement of destroyed machines or worn parts in a very short space of time. In spite of the greatest losses resulting from the offensives of the Germans or of the Allies, the threatened crisis in aviation materiel is averted.

(VITH ARMY, 9/3/18).

Germany's effort to increase this production continues. Enlargements of the Friedrichshafen factories are not only planned but are in course of execution. They are to be doubled. (1) (8/30/18).

The great Daimler Societe is making new installations for the manufacture of aeroplane motors near Johannistal (Berlin).

The aviation administration is preparing an enormous construction program for next winter, destined to counter-balance American production. (Marine, 8/31/18).

The German Government is now seeking to acquire materiel from Russia and from Roumania. (8/30/18).

Beside this crisis in materiel, there also existed a crisis in personnel and officers for German aviation. Germany is now seeking to provide against it by promising new advantages, notably easier access to the grade of officer, for the men and non-commissioned officers entering the air service.

In Bavaria, on July 5, 1918, the Minister of War published a circular which, after recalling Ludendorff's note No. 58,034 op (2), requests that the recruiting of officers from all branches be made for the aviation troops.

The Chief of the Ludendorff Staff sent the following note to the Armies on 6/11/18.

"Note I c No. 58,034 from the Chief of the General Staff of the Army in the field, dated 6/26/17, led to a notable increase in the number of officers who wished to enter the air service ; but now the number shows a constant diminution.

"However, it is imperative to have a constant afflux of officers to the air service if we wish to maintain at a sufficient level the number of officer-pilots.

"Therefore, I request that my note to the Armies I c 58,034, of 6/26/17 (2) and I c/11 78,178, of 12/18/17, be again brought to the attention of all staffs, troops and officers."

### A GIANT GERMAN PLANE

#### TRANSLATION.

HAMBURGER NACHRICHTEN, SEPT. 24, 1918.

"The war correspondent of the Daily Chronicle in Rotterdam telegraphs his paper that the Germans possess a powerful new battle plane. The apparatus has a carrying capacity of over 1,000 kilos of explosives and is operated by a crew of eight men. The ease with which this giant plane may be handled is most conspicuous, and it is particularly useful in brisk action after dark, and in aerial attacks on military positions in the area of the lines of communication."

### OPERATIONS

October 3rd, 1918.—Our pursuit planes carried out their usual protective patrols over the sector throughout the day. In the afternoon, during a raid on hostile balloons, they engaged a number of enemy planes, 4 of which were brought down.

Corps observation planes executed a number of reconnaissance and artillery surveillance missions. They also carried out the usual flights to identify the front line.

Our Army Observation Group took a number of photographs of the region between DUN-SUR-MEUSE and GRANDPRE.

Eleven planes of the Day Bombing Squadron carried out a raid shortly before noon and dropped 1/2 tons of bombs on GRANDPRE. Eight groups of bursts were observed on the town and four on the railroad tracks.

### SUMMARY OF OPERATIONS SEPTEMBER, 1st TO 30th 1918

Our bombing squadrons dropped during this period 37. 5 tons of bombs distributed among the following towns and villages :

Audun-le-Roman.	Arnaville.
Longuyon.	Abbieville.
Dommary-Baroncourt.	Dun-sur-Meuse.
Conflans.	Gorze.
Buxieres.	Haydenville.
Vignenilles.	Grandpre.
Chambley.	Marcq.
Etain.	Buxerulles.

CONFIDENTIAL

No. 66.

## SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

## VIMY-COMBLES REGION.

212th Reconnaissance Flight . With 17th German Army, Aug. 27..... Document, French source. Last identified in Combles-Noyon region, July, 1918.

## NOYON-RHEIMS REGION.

6th Battle Flight ..... Toulis, Sept. 7. Document, French source. Last identified in Rheims-Argonne region, July 28, 1918.  
266th Reconnaissance Flight . With 7th German Army, Aug. 13..... Last identified in Lys-Vimy region, July 10, 1918.

## EXTERIOR FRONTS.

34th Reconnaissance Flight ... Balkans, Aug. 16. Document, French source ..... Last identified in Lys-Vimy region, June 20, 1918.

NOTE.—A prisoner from the 3rd Battle Flight, which is reported to be located at Rethel, states that the 5th Battle Flight is also located there.

Another prisoner of the 21st Battle Flight, who said he had been located at Stenay since Sept. 28, and later stated that he had not been at Stenay but at Montmedy, states that the 5th, 20th and 33rd Battle Flights had been at Anoux but were now at Montmedy. He states that there is also one reconnaissance flight there.

Another prisoner, who claims he belongs to the 10th Pursuit Flight, states that the 10th and 28th Pursuit Flights are located at Montoy airdrome, and that the 43rd Pursuit Flight is located at Metz.

The statements of these prisoners conflict and further confirmation is required. Additional information on these flights is desired.

## IDENTIFICATIONS

## RHEIMS-ARGONNE REGION.

49th Pursuit Flight ..... Blaise, Sept. 26. Pris. statement, French source ..... Identified at same place, Aug. 20, 1918.

## VOSGES-SWITZERLAND REGION.

76th Pursuit Flight..... Habsheim, Sept. 2. Pris. statement, French source. Last identified same place, Aug. 23, 1918.

## AIRDROMES

## VOSGES-SWITZERLAND REGION.

1. Reported airdrome requiring confirmation by photograph.  
2144. St. Moritz (12 kilometers N. W. of Schlestadt).

GERMAN AIRDROME ACCOMMODATION FROM ARGONNE TO THE SWISS BORDER, SEPTEMBER 8, 1918, AND OCTOBER 5, 1918

Region.	Airdromes.		Hangars.		Sheds.		Capacity.	
	Sept. 28.	Oct. 5.	Sept. 28.	Oct. 5.	Sept. 28.	Oct. 5.	Sept. 28.	Oct. 5.
Argonne-Moselle.....	40	43	267	286	70	72	961	1006
Moselle-Vosges.....	30	39	239	241	78	78	1133	1137
Vosges-Switzerland.....	33	33	267	261	102	103	1353	1353
Total .....	112	115	773	788	250	253	3447	3496

## DISTRIBUTION OF IDENTIFIED GERMAN AIR UNITS FOR WEEKS ENDING SEPTEMBER 28 AND OCTOBER 5

Region.	Pursuit.		Reconnaissance.		Battle.		Bombing.	
	Sept. 28.	Oct. 5.	Sept. 28.	Oct. 5.	Sept. 28.	Oct. 5.	Sept. 28.	Oct. 5.
Flanders .....	7	7	9	8	3	3	6	6
Lys-Vimy .....	9	9	22	19	2	2	6	6
Vimy-Combles .....	13	11	14	15	2	2	3	3
Combles-Noyon .....	9	8	22	23	10	9	6	6
Noyon-Rheims .....	13	10	40	38	9	9	3	3
Rheims-Argonne .....	10	15	10	10	9	9	..	..
Argonne-Moselle.....	12	12	12	13	6	7	..	..
Moselle-Vosges.....	4	4	9	9	..	..	3	3
Vosges-Switzerland .....	4	5	9	9	..	..	..	..
Exterior Fronts .....	2	2	16	17	..	..	..	..
Unlocated.....	2	2	1	1	1	1	..	..
Total .....	85	85	163	162	42	42	27	27

## ENEMY AERIAL ACTIVITY

October 4, 1918.—Enemy aviation very active throughout battle areas. Only moderate activity over the rest of our sector. His pursuit planes flew in formations of 2 to 9 planes endeavoring to interfere with work of our infantry liaison and artillery surveillance planes. In several instances they bombed and machine-gunned our front lines.

Reconnaissance and reglage planes less active. Greatest activity was noted in the Woevre. No day reconnaissances reported.

Considering poor visibility, the hostile balloons were fairly active

**FROM THE INTELLIGENCE SECTION OF THE ROYAL ITALIAN ARMY**

SEPTEMBER 26, 1918.

SPECIAL EXCERPT FROM THE BULLETIN OF MILITARY INFORMATION DRAWN EXCLUSIVELY FROM THE PRESS.

**THE REORGANIZATION OF THE AUSTRO-HUNGARIAN AERONAUTIC TROOPS**

"Die Zeit" (Vienna) Sept. 20.—The aeronautic troops have been reorganized for the duration of the war in the following manner:

The management of all aerial services in the Imperial and Royal Army is the duty of the supreme Command, on which depend all of the field and interior formations.

FIELD FORMATIONS.—(Feldformationen) command of the army aviators, chasing-squadrons, battle squadrons, scouting squadrons, squadrons of large aeroplanes, companies of war aviators, balloon companies, aviation parks, reserve balloon groups, etc.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### VIMY-COMBLES REGION.

229th Reconnaissance Flight..	Wavrechain, Sept. 17, Document, R.	Last identified in Rheims-Argonne re-
	A. F .....	gion, July 24.
258th Reconnaissance Flight..	Inchy area, Sept. 17, Document, R.	Last identified in Lys-Vimy region,
	A. F .....	July 7.

## IDENTIFICATIONS

Nil.

## AIRDROMES

Nil.

## ENEMY AERIAL ACTIVITY

October 5, 1918.—Activity slight in the morning. Much greater in the afternoon, especially over the battle areas.

Enemy's pursuit planes worked in formations of 6 to 9 planes as on previous days, trying to prevent reconnaissance on the part of our planes.

Reconnaissance planes fairly active in the region E. of Verdun and on the right of our sector.

At all o'clock this morning a plane dropped propaganda N. E. of St. Benoit.

Recicourt and Dombasle were bombed by enemy plane early this evening.

Hostile balloons were inactive.

## DEFENSE AGAINST AEROPLANES FLYING AT A LOW ALTITUDE

(TRANSLATION OF AN AUSTRO-HUNGARIAN DOCUMENT RECEIVED FROM THE INTELLIGENCE, SECTION OF THE ROYAL ITALIAN ARMY.)

IMPERIAL AND ROYAL SUPREME COMMAND.

OP. NO. 99, 652.

*Fire Against Enemy Aeroplanes Flying at a Low altitude.*

BADEN, AUGUST 9, 1918.

Written and oral reports that have reached this Command, are unanimous in asserting that, while the material effects (dead and wounded) produced upon our troops by enemy aircraft flying at a low altitude are comparatively scant, the moral effects are on the contrary great.

This is to be attributed to the fact that the troops, not appropriately trained, in general allow themselves to be much alarmed by the new and unexpected method of fighting (as is confirmed also by German experience). Therefore measures must be taken in the matter.

This order is to be issued even to the petty detachments.

It is directed to the Commands of the Army Groups, to the Army Commands, to the Command in Albania, to the Inspectorate of Anti-Aircraft Artillery (LEAKNFORM der A. I. F.), and also, for their information, to the Ministry of War (Section 5L) and to the General Inspectorate of Aeronautics and of the Artillery School at Udine.

For the Chief of the Army General Staff.  
Major General WALDSTAETEN m. p.

## OPERATIONS

October 5, 1918.—Our pursuit planes were very active throughout the day and maintained a protective barrage over the entire sector flying at a low altitude and protecting and assisting our Corps Observation units in their work.

Many reconnaissance and infantry liaison missions were carried out.

Our Army Observation groups went on several photographic reconnaissance missions and obtained a number of good photographs.

In the afternoon bombing planes bombed LANDRES and DOULCON.



SUMMARY OF AIR INFORMATION

CHANGES IN LOCATION OF UNITS

VIMY-COMBLES REGION.		
59th Pursuit Flight.....	Aug. 20 and Sept. 17. Document, R.	Reported in Noyon-Rheims region, June, 10, 1918.
"	A. F. ....	
RHEIMS-ARGONNE REGION.		
5th Bombing Squadron .....	Scraincourt. Sept. 29. Document, R.	Last identified in Lys-Vimy region.
(1st, 5th and 6th Flights)....	A. F. ....	Sept. 18.
201st (LB) Reconnaissance	Rethel area. Sept. 22. Document, R.	Reported in Flanders in August, 1918
Flight .....	A. F. ....	(may have been incorrect).
NOTE.—"LB" indicates flight is a unit engaged exclusively in photographic work.		
ARGONNE-MOSELLE REGION.		
18th Pursuit Flight.....	Bruville area. Sept. 20. Prisoner's statement, American source.....	Last identified at Montoy (Moselle-Vosges region), Aug. 23.
NOTE.—This flight is probably at the Doncourt airdrome (No. 72).		

IDENTIFICATIONS

NOYON-RHEIMS REGION.		
39th Reconnaissance Flight.	Laon area. Aug. 17. Document, R. A. F.	Identified in same area, July 11.
Document shows this flight is an Army long distance reconnaissance unit ; probably working for the 9th German Army.		
ARGONNE-MOSELLE REGION.		
46th Reconnaissance Flight.	Briey. Oct. 5. Prisoner's statement, American source .....	Last identified at same place, Aug. 16.

AIRDROMES

VOSGES-SWITZERLAND REGION.		
Changes in accommodation.		
1. Changes in existing airdromes.	Hangars. Sheds. Capacity.	Present accommodation. Hangars. Sheds. Capacity.
34. Hombourg.....	—1 .. —2	4 1 12
French photo., 3-10-18. One structure thought to be part of the airdrome appears to be used as a warehouse.		
84. Hasingue .....	+10 .. +20	18 .. 36
Increase since 12-8-18. French photo. 2-10-18.		
3. Photograph of the following airdrome shows no change.		
63. Rosenau.....	.. ..	.. 4 12
French photo. 2-10-18.		

ENEMY AERIAL ACTIVITY

October 6, 1918.—The enemy's air forces continue to be active W. of the Meuse and there was a very noticeable increase in activity on the right of our sector.

His pursuit planes made several attacks on our balloons at various points of the front and general flying in large formations. In one instance 21 hostile planes were seen together over the region of Vigne-ville.

Reconnaissance and reglage planes show less activity than usual.

During the night of Oct-5-6, bombing planes dropped bombs in the region of Villers-en-Haye, St. Genadize, Bezaumont and various points along our sector.

Many balloons seen in ascension during the day.

OPERATIONS

October 6, 1918.—Besides maintaining patrols over our sector throughout the day, our pursuit units attacked the town of Briulles and the roads leading to it with bombs and machine-guns and they also furnished protection for our bombing planes, which successfully bombed Bantheville and Doulcon.

Corps Observation planes carried out the usual infantry liaison and reconnaissance missions.

Our Army Observation Groups made 11 visual reconnaissances of the territory in the enemy's rear.

No photographing was possible on account of low clouds.

During the night our night flying planes made several flights far over the enemy's lines.

COMMENDATION OF DAY BOMBARDMENT GROUP

The following extracts from a telegram and letter have been received by the ... Day Bombardment Group :

" . . . . THE EXCELLENT WORK DONE BY THE OFFICERS AND MEN OF YOUR GROUP DURING THE RECENT OFFENSIVE DESERVES AND HAS RECEIVED HEARTY COMMENDATION. I CONGRATULATE YOU AND YOUR COMMAND ON THE RECORD YOU HAVE MADE FOR YOURSELVES AND FOR THE AIR SERVICE. IT IS GOOD TO KNOW THAT WE CAN RELY UPON YOU TO KEEP UP THIS FINE WORK WHICH COUNTS FOR SO MUCH IN BRINGING ABOUT THE RESULTS DESIRED."

"1. The work of the ... Bombardment Group during the battle of St. Mihiel, and in the operations after it, has been such as to bring out the praise and appreciation of all the troops and allied services

participating in the operations. This Group, under most difficult conditions, with new equipment, and pilots and observers who had recently come up on the front, has shown a devotion to duty and an initiative which has not been exceeded by any troops on the front.

"2. The work of the ... Bombardment Group has materially aided in hindering hostile concentrations of troops, troop movements along roads, and in sweeping the enemy's pursuit aviation back, thereby making lighter the work of our pursuit aviation along the immediate front.

"3. I desire that all members of the Group be informed of the high regard in which their work is held throughout this Army."

#### **DROPPING ENEMY PEACE OVERTURES**

The 4th Corps Observation Group dropped thousands of copies of the enemy's peace overtures over the enemy lines. It is reported that they were read with great interest by the enemy troops.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

Nil.

## IDENTIFICATIONS

Nil.

## AIRDROMES

MOSELLE-VOSGES REGION.

1. *Reported airdrome requiring confirmation by photographs.*  
2145. Maisery. Reported 7-10-18.

## SHED DISMANTLING DETACHMENTS

**Flieger Abbau Kommando.**

BRITISH SOURCE, 4-10-18.

The 509th Flieger Abbau Kommando has been identified in the Lille sector ; this is the first of these units to be reported.

Their duty is apparently the dismantling of sheds at airdromes. It is of interest to note that the enemy employs two different units, Flieger Hallenbau Kompagnien to erect sheds, and Flieger Abbau Kommando to dismantle them.

## ENEMY AERIAL ACTIVITY

October 7, 1918.—Only slight enemy activity of pursuit planes in battle areas.

Enemy reconnaissance planes were very inactive.

Early in the evening enemy planes dropped about 60 bombs in the rear of one of our positions.

Only a few hostile balloons were seen in ascension.

## OPERATIONS

October 7, 1918.—In spite of high winds and generally poor visibility, our pursuit planes carried out their usual patrols.

The Corps Observation planes kept in touch with infantry and made a number of reconnaissances.

In several instances our planes went to the aid of an isolated battalion, dropping food, carrier pigeons and ammunition.

Our Army Observation groups made reconnaissances over the region of Grandpre, Buzancy, Mouzay and Damvillers. In night no reconnaissance or bombing missions were carried out.

On October 5th and 6th, propaganda was distributed over the area of Grandpre, St. Juvin, Dun and Buzancy.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### FLANDERS REGION.

3rd Naval Coastal Prot. Flight }  
4th Naval Coastal Prot. Flight } Uytkerke. Sept. 17. Document, R. A. F. Not previously identified.

### VIMY-COMBLES REGION.

26th Pursuit Flight..... Le Quesnoy area. Recent date. Prisoner's statement, R. A. F..... Last identified in Noyon-Rheims region, Aug. 7, 1918.  
This flight is now reported to belong to the 3rd Pursuit Squadron. The three other flights of this squadron (27th, 34th and 77th flights) have also been recently identified in the Le Quesnoy area, possibly at the Escarmain airdrome.  
39th Pursuit Flight..... Denain area. Oct. 2. Prisoner's statement, R. A. F..... Last identified in the Noyon-Rheims region, June 16, 1918.

### COMBLES-NOYON REGION.

1st (Richthofen) Pursuit Squadron (4th, 6th, 10th and 11th flights)..... With 18th German Army. Oct. 2. Prisoner's statements, R. A. F..... Last identified in the Conflans area (Argonne-Moselle Region). Sept. 27.

### ARGONNE-MOSELLE REGION.

5th Battle Flight..... Thonne-les-Pres. Oct. 2. Prisoner's statement, American source..... Last identified at Anoux (same region)- Sept. 16, 1918.  
20th Battle Flight..... Thonne-les-Pres. Oct. 2. Prisoner's statement, American source..... Last identified at Anoux (same region), Sept. 16.  
21st Battle Flight..... Thonne-les-Pres. Oct. 2. Prisoner's statement, American source..... Erroneously reported at Stenay (same region), Oct. 2.  
33rd Battle Flight..... Thonne-les-Pres. Oct. 2. Prisoner's statement, American source..... Last identified in Combles-Noyon region, May 30.  
36th Reconnaissance Flight.. With 5th German Army in the Sivry-sur-Meuse area. Sept. 8. Document, American source..... Last identified at Frescaty (Metz), July 11, 1918.

## IDENTIFICATIONS

### RHEIMS-ARGONNE REGION.

226th Reconnaissance Flight. Juniville. Sept. 24. Document, R.A.F. Last identified at the same place, July 19, 1918.

### AIRDROMES

Nil.

## ENEMY AERIAL ACTIVITY

October 8, 1918.—Enemy pursuit planes were active on both sides of the Meuse, On the left of our sector, a number of adjustment reconnaissance planes reported in the same region. In two instances enemy planes used machine-guns against our assault troops. Very little activity on the rest of our front.  
Only slight activity on the part of hostile balloons.

## OPERATIONS

October 8, 1918.—Our Army Observation corps carried out several successful reconnaissance missions over the enemy's rear areas on both sides of the Meuse and to the N. E. as far as Audun-le-Romagne and Briey.

Bad weather prevented our night reconnaissance and bombing planes from operating.

Corps observation planes were active identifying the front line. One of these planes brought down an enemy biplace plane just N. of Sommerance (on enemy territory).

Our pursuit planes carried out their usual patrols.

## DISTINGUISHED SERVICE CROSS AWARDS

The following-named officers have been awarded the Distinguished Service Cross :

1st Lieut. William P. Erwin.  
2nd Lieut. Burne E. Baucom.  
2nd Lieut. R. E. De Castro.  
1st Lieut. A. E. Easterbrook.  
Lieut. Edward Orr (deceased).  
Lieut. Phil. A. Henderson.  
2nd Lieut. Dogan H. Arthur.  
2nd Lieut. Howard T. Fleeson.  
1st Lieut. Charles R. Blake.  
2nd Lieut. Earl W. Porter.  
2nd Lieut. David C. Beebe.  
2nd Lieut. Franklin B. Bellows (deceased).

The Eighth Aero Squadron has received an appreciation of its work during the St. Mihiel operations from the Commanding General of the First Division, reading as follows :

"1. I desire to express formally and in writing my thanks for the valuable assistance rendered by the 8th Observation Squadron during the recent offensive operations against the St. Mihiel salient.

"2. Under most trying weather conditions the Squadron carried out with marked courage and devotion its mission, contributing materially to this brilliant success of American arms.

"3. To you and to your fine command I desire to convey the thanks of the Division and myself."

# **SUMMARY OF AIR INFORMATION**

## **CHANGES IN LOCATION OF UNITS**

Nil.

## **IDENTIFICATIONS**

Nil.

## **AIRDROMES**

Nil.

## **ENEMY AERIAL ACTIVITY**

October 9, 1918.—A slight increase in the enemy's pursuit aviation which operated in formations of from two to eight planes.

Enemy adjustment and reconnaissance machines also more active than on the preceding days, especially on the right of our sector.

One deep reconnaissance mission reported over the region of Revigny.

At 9.35 last night enemy planes bombed our front and rear areas west of the Meuse dropping about 100 bombs.

Quite a number of enemy balloons were in ascension during the day.

## **OPERATIONS**

October 9, 1918.—Not much activity during morning, on account of poor visibility. Later in the day our pursuit planes took up their regular patrols and kept them up for the remainder of the day.

Our Corps Observation planes carried out their usual reconnaissance and infantry liaison flights.

A bombing plane raided Bantheville, St. Juvin.

Several reconnaissance missions carried out by Army Observation groups over enemy's rear areas.

In the afternoon approximately 200 French and American planes went on a raiding expedition dropping a great number of bombs on cantonments around Damvillers, using their machine-guns on hostile troop concentrations in the region of La Wavrille.

During the course of this raid 12 enemy planes were shot down with a loss of only one of our machines.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### COMBLES-NOYON REGION

68th Pursuit Flight ..... Guise area. Aug. 18. Document R. A. F. Reported at Mars-la-Tour, (Argonne-Moselle region), Aug. 6, 1918.

### NOYON-RHEIMS REGION.

7th Battle Flight..... Marle area. Sept. 1. Document, R. A. F. Last identified in the Rheims-Argonne region, July 14, 1918.

### ARGONNE-MOSELLE REGION.

296th Reconnaissance Flight. Conflans area. Sept. 6. Document, R. A. F. Last identified in the Noyon-Rheims region, Aug. 18, 1918.

### EXTERIOR FRONTS.

66th Reconnaissance Flight .. Sept. 4 and 30. Serbia. Document, R. A. F. This flight was reported to have been disbanded on the Balkan front in 1917.

## IDENTIFICATIONS

### NOYON-RHEIMS REGION.

7th Army Aircraft Park..... La Ville-aux-Bois. Sept. 6. Document, R. A. F. Identified in same area, August 13, 1918

### ARGONNE-MOSELLE REGION.

67th Pursuit Flight ..... Marville. Oct. 3. Prisoner's statement, French source ..... Last identified at same place, Sept. 2, 1918.

## AIRDROMES

NIL

## NIGHT PROTECTIVE FLIGHTS

A prisoner, formerly belonging to the 21st Battle Flight, states that the 32nd and 37th Battle Flights are used as night protective flights (*Nachtschutzstaffeln*). Their mission is to defend rear areas from enemy planes and they work individually.

These two flights were identified in the Briey area (Argonne-Moselle region), Sept. 26.

## TERMS FOR AIRCRAFT

FROM THE TRANSLATION OF A GERMAN DOCUMENT DATED SEPT. 2, 1918

In order to avoid technical abbreviations which are generally difficult to understand, the following terms will be used for our aircraft, as well as for those of the enemy which are to be used within Army Detachment C by fliers and others in the service :

Jagdflugzeug—single-seater.

Arbeitsflugzeug—two-seater.

Grossflugzeug—3, or 4-seater.

Riesenflugzeug—4, or more, seater.

If it appears important to give the type of plane and the number of occupants, these should be added to the description of the plane.

## ENEMY AERIAL ACTIVITY

October 10, 1918.—Enemy pursuit planes showed a marked increase on the extreme left of our sector flying in large formations and in several cases attacking our balloons. Activity only slightly above normal on the rest of our front.

Adjustment and reconnaissance planes were also active, especially in the WOEVRE.

A deep reconnaissance was reported over the region of COMMERCY-SERCY.

Hostile balloons were active.

## PHOTOGRAPHS OF GERMAN PLANES

No. 2 OF THE SERIES.

### HANNOVER BIPLACE BIPLANE

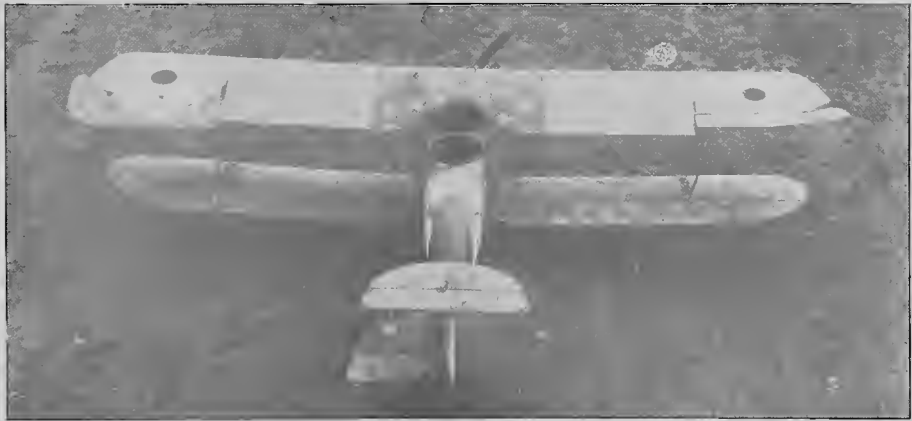
COMBAT TYPE C L 2.

MAXIMUM SPREAD.—38 ft.

OVERALL LENGTH.—25 ft.

TOTAL MAIN PLANE AREA.—350 sq. ft.

WING SHAPE.—Upper plane the larger, trapezoidal in shape with overhanging balanced ailerons whose trailing edges are cut back. Lower plane has distinctly rounded tips with leading edge the longer. Both planes have dihedral but no sweepback and there is a considerable stagger. One pair of non-parallel struts on each side of fuselage connects the planes. There is small clearance between the fuselage and upper plane.



**HANNOVER FIGHTER**  
TYPE CL 2





**AILERONS.**—On upper plane only, and balanced.

**RUDDER AND FIN.**—Rather octagonal in shape. The fin is built solid with the fuselage.

**ELEVATORS AND TAILPLANE.**—Of biplane construction with light pair of struts connecting upper and lower elevators. Lower elevator is divided to allow rudder play.

**FUSELAGE.**—Very deep at maximum section, and of practically rectangular shape with curved top. Single cockpit for pilot and gunner.

**ENGINE.**—180 H. P. Opel-Argus, 6 cylinder motor.

**ARMAMENT.**—One Spandau machine gun fixed and firing through the propeller, and a Parabellum gun mounted on the Observers turret. As in the Halberstadt, this gun has an excellent field of fire.

<b>WEIGHT.</b> —Empty.....	1731 lbs.
Fuel .....	297 "
Useful load .....	544 "
<b>Total.</b> .....	2572 "

**PERFORMANCES.**—Climbs to 10,000 feet in 18 minutes, and to 13,000 feet in 30 minutes. Horizontal speed at 10,000 feet, 92 m. p. h. ; at 13,000 feet, 86 m. p. h.

**REMARKS.**—Recently these planes have been reported with an additional machine gun firing down and forward through the floor of the cockpit. Planes soequipped are evidently intended for more effective work against ground troops.

#### OPERATIONS

October 10, 1918.—During the night our night-flying planes carried out a reconnaissance over the region CONFLANS, AZANNES, DAMVILLERS, JAMETZ, LOUPPY, MONZOY and REMONVILLE.

In the course of the day the first day bombardment group raided DUN-sur-MEUSE, MILLY-devant-DUN and VILLERS-devant-DUN, dropping a total of 6,400 kilos of bombs with good effect.

Our pursuit planes were very active throughout the day patrolling the lines, attacking hostile balloons, and furnishing protection for our bombing planes. While on these missions they engaged in numerous combats bringing down a number of enemy planes.

A great number of photographs have been taken by our reconnaissance planes, and in addition the Corps planes determined the location of our troops and executed numerous reconnaissance and artillery surveillance missions, while our Army Squadron operated over the enemy's rear areas.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

Nil.

### IDENTIFICATIONS

#### RHEIMS-ARGONNE REGION.

74th Pursuit Flight..... Tagnon area. Aug. 15. Document, Last identified at Bergnicourt (same region), May 15, 1918.  
R. A. F. ....

### AIRDROMES

#### ARGONNE-MOSELLE REGION

1. Photograph of the following airdrome shows no change.

	Change in accommodation.			Present accommodation.		
	Hangars.	Sheds.	Capacity.	Hangars.	Sheds.	Capacity.
56. Longuyon .....	..	..	..	13	..	25
British photo, 9-10-18.						

#### MOSELLE-VOSGES REGION

1. Changes in existing airdromes.

7. Frescaty .....	+21	+1	+48	21	5	148
Increase since 16-9-18. British photo, 9-10-18.						
17. Thionville .....	+1	..	+1	20	..	20
Increase since 13-9-18. British photo, 9-10-18.						

2. Photograph of the following airdrome shows no change.

93. Bischwald .....	..	..	..	..	3	9
British photo, 7-9-18.						

#### VOSGES-SWITZERLAND REGION

1. Changes in existing airdrome.

84. Hasingue .....	-1	..	-2	17	..	34
Decrease since 2-10-18.						

## GERMAN AIRDROME ACCOMMODATIONS FROM ARGONNE TO THE SWISS BORDER, OCTOBER 5, 1918 AND OCTOBER 12, 1918

Region.	Airdromes.		Hangars.		Sheds.		Capacity.	
	Oct. 5.	Oct. 12.	Oct. 5.	Oct. 12.	Oct. 5.	Oct. 12.	Oct. 5.	Oct. 12.
Argonne-Moselle.....	43	43	286	286	72	72	1006	1006
Moselle-Vosges .....	39	39	241	263	78	79	1137	1186
Vosges-Switzerland .....	33	33	264	272	103	103	1355	1371
Total .....	115	115	791	821	253	254	3498	3563

## DISTRIBUTION OF IDENTIFIED GERMAN AIR UNITS FOR WEEKS ENDING OCTOBER 5 AND OCTOBER 12

Region.	Pursuit.		Reconnaissance.		Battle.		Bombing.	
	Oct. 5.	Oct. 12.	Oct. 5.	Oct. 12.	Oct. 5.	Oct. 12.	Oct. 5.	Oct. 12.
Flanders.....	7	7	8	7	3	3	6	6
Lys-Vimy .....	9	9	19	18	2	2	6	3
Vimy-Combles .....	11	14	15	17	2	2	3	3
Combles-Noyon .....	8	13	23	23	9	8	6	6
Noyon-Rheims .....	10	7	38	37	9	10	3	3
Rheims-Argonne.....	15	15	10	10	9	8	..	3
Argonne-Moselle .....	12	8	13	15	7	8	..	..
Moselle-Vosges .....	4	3	9	8	..	..	3	3
Vosges-Switzerland .....	5	5	9	9	..	..	..	..
Exterior Fronts .....	2	2	17	18	..	..	..	..
Unlocated .....	2	2	1	1	1	1	..	..
	85	85	162	163	42	42	27	27

Total identified flights (all classes) on all fronts, Oct. 12, 1918..... 344  
Total estimated machines belonging to such flights..... 2975

## ENEMY AIR ORDER OF BATTLE, ARGONNE TO SWISS BORDER, OCTOBER 12, 1918

### ARGONNE-MOSELLE REGION

#### Pursuit Flights:

12th—Unlocated.  
13th—Unlocated.  
15th—Unlocated.  
18th—Bruville area.  
(Probably Conflans airdrome, No. 72).  
19th—Unlocated.  
64th—Mars-la-Tour (before the advance) .....  
65th—Mars-la-Tour (before the advance).  
67th—Marville (Airdrome No. 30).

#### Bombing Flights. None.

#### Battle Flights.

2nd—Autrecourt (Airdrome No. 103).

#### Reconnaissance Flights:

29th—West of Briey (Probably Briey airdrome No. 16).  
31st—Doncourt (Airdrome No. 72).  
36th—Unlocated.  
37th—Doncourt (Airdrome No. 72).  
44th—Thonne-les-Pres (Airdrome No. 54).  
46th—Briey (Airdrome No. 58).  
47th—Unlocated.  
206th—Unlocated.  
215th—Sommauthe (probably at Buzancy airdrome No. 400).  
246th—Briey (Airdrome No. 58).  
274th—Stenay (Airdrome No. 57).

5th—Thonne-les-Près (Airdrome No. 54).  
20th—Thonne-les-Près (Airdrome No. 54).  
21st—Thonne-les-Près (Airdrome No. 54).  
32nd—Briey area.  
33rd—Thonne-les-Près (Airdrome No. 54).  
37th—Briey area.  
45th—Briey N. (Airdrome No. 58).

279th—Porcher (Airdrome No. 59).  
280th—Thonne-les-Près (Airdrome No. 54).  
296th—Conflans area.  
298th—Buxieres (before the advance).

*Mosaic Sections.*  
Army Detachment C—Briey (Airdrome No. 16).

#### MOSELLE-VOSGES REGION

##### *Pursuit Flights:*

78th—Buhl (Airdrome No. 6).  
80th—Marimont (Airdrome No. 47).  
84th—Frescaty (Airdrome No. 7).

##### *Reconnaissance Flights:*

12th—Many (Airdrome No. 11).  
67th—Lorquin (Airdrome No. 12).  
100th—Morhange (Airdrome No. 8).  
199th—Marimont (Airdrome No. 47).  
218th—Unlocated.  
242nd—Frescaty (Airdrome No. 7).  
257th—Morhange (Airdrome No. 8).  
281st—Lorquin (Airdrome No. 12).

##### *Bombing Flights:*

25th—Boulay (Airdrome No. 61).  
26th—Boulay (Airdrome No. 61).  
27th—Boulay (Airdrome No. 61).

##### *Battle Flights.* None.

##### *Home Defence Flights:*

1st—Bitche (Airdrome No. 107).  
2nd—Folpersweiler (Airdrome No. 60).  
3rd—Morhange (Airdrome No. 8).  
8th—Bitche (Airdrome No. 107).

#### VOSGES-SWITZERLAND REGION

##### *Pursuit Flights:*

69th—Habsheim (Airdrome No. 26).  
70th—Stotzheim (Airdrome No. 89).  
71st—Habsheim (Airdrome No. 26).  
75th—Habsheim (Airdrome No. 26).  
76th—Habsheim (Airdrome No. 26).

##### *Home Defence Flights:*

4-B—Fribourg (Airdrome No. 2).  
5th—Neuf-Brisach (Airdrome No. 23).  
6th—Neuf-Brisach (Airdrome No. 23).  
14th—Lahr (Airdrome No. 41).  
? —Karlsruhe (Airdrome No. 65).

##### *Bombing Flights:* None.

##### *Reconnaissance Flights:*

4th—Hagenau (Airdrome No. 55).  
10th—Schlestadt (Airdrome No. 4).  
43rd—Schlestadt (Airdrome No. 4).  
214th—Schlestadt (Airdrome No. 4).  
243rd—Colmar (Airdrome No. 28).  
267th—Habsheim (Airdrome No. 26).  
276th—Niedernai (Airdrome No. 74).  
282nd—Sierentz (Airdrome No. 27).  
289th—Habsheim (Airdrome No. 26).

##### *Mosaic Sections:*

4th—Altdorf (Airdrome No. 88).  
*Battle Flights:* None.

#### ENEMY AERIAL ACTIVITY

October 11, 1918. Very little activity throughout the day.

During the night hostile planes bombarded our rear areas.

Bombs were dropped on Rampont; St. Mihiel, Lamarche and St. Benoit.

#### GERMAN AEROPLANES

FROM R. A. F., SUMMARY OF AIR INTELLIGENCE, OCT. 7, 1918

“FOKKER” MONOPLANE SCOUT.—A captured scout pilot confirms that many cases of wings breaking off have occurred, and states that these machines are being strengthened.

“PFALZ D. 12” SCOUT.—The same prisoner states that the speed and climb of the new PFALZ scout are possibly somewhat better than in the case of the FOKKER D. 7, but it is unpopular owing to its indifferent maneuverability; it is also a difficult machine to land.

“SIEMENS SCHUCKERT” SCOUT.—The number of these machines available is low, on account of difficulties in production. This type of scout is generally popular.

“ALBATROS C. 15” TWO-SEATER.—This is stated to be a tractor biplane, fitted with a 200 h. p. Benz engine. It is said to be similar to the Albatros C. 12, except that the planes are staggered forward; there are two pairs of vertical type interplane struts.

Its performance is very similar to that of the D. F. W., and it is employed in artillery and close reconnaissance work.

#### OPERATIONS

October 11, 1918.—Poor visibility prevented execution of important missions.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### FLANDERS REGION

203rd Reconnaissance Flight.. Courtrai area. Oct. 9. Prisoner's statement, R. A. F. .... Last identified in Combles-Noyon region, Aug. 19, 1918.

### LYS-VIMY REGION.

24th Battle Flight. .... Lille area. Oct. 9. Prisoner's statement, R. A. F. .... Last identified in Flanders region, July 10 1918.  
250th Reconnaissance Flight. Roubaix area. Oct. 9. Prisoner's statement, R. A. F. .... Last identified in Flanders region, Sept. 18, 1918.

### NOYON-RHEIMS REGION.

276th Reconnaissance Flight. Laon area. Sept. 21. Document, R. A. F. .... Last identified in Vosges-Switzerland region, Sept. 2, 1918.

### MOSELLE-VOSGES REGION

275th Reconnaissance Flight. Metz area. Sept. 18. Document, R. A. F. .... Last identified in Combles-Noyon region, Aug. 28, 1918.

## IDENTIFICATIONS

Nil.

## AIRDROMES

### ARGONNE-MOSELLE REGION.

1. Reported airdromes photographed and found not to exist :  
2154. Sommanthe.

### MOSELLE-VOSGES REGION

1. Reported airdromes requiring confirmation by photograph :  
2115. Friedrichsfeld (8 km. S. E. of Mannheim). Reported 4-9-18.  
2125. Ludwigshafen (1 km. S. W. of Mannheim). Reported May, 1918. 7 fighter machines seen.  
2113. Walleringen (4 km. N. E. of Morhange). Reported 9-10-18.
2. Reported airdromes photographed and found not to exist :  
2151. Sueblinge.  
2152. Mittersheim.  
2137. Porcellette.  
2138. Vahl Ebersing.

### VOSGES-SWITZERLAND REGION

1. Reported airdromes photographed and found not to exist :  
2130. Dachsten.  
2148. Epfig.  
2101. Hochfelden.  
2136. Krautergersheim.

## ENEMY AERIAL ACTIVITY

October 12, 1918.—Enemy planes showed some activity during the morning over the battle area flying in formations of three to seven machines. In several cases they attacked our troops and the roads leading to the front with machine guns.

Only a very few reglages and reconnaissance planes reported.  
Hostile balloons were inactive.

## GERMAN AEROPLANES

FROM R. A. F. SUMMARY OF AIR INTELLIGENCE, OCTOBER 2, 1918

**NEW HALBERSTADT TWO-SEATER.**—A prisoner confirms the existence of the HALBERSTADT two-seater. This is the C. L. 5 type, fitted with a 200 h. p. Benz engine ; the machine much resembles the C. L. 2 and C. L. 4 machines of this make, excepting that the span is larger and that there are two pairs of interplane struts on either side of the fuselage.

As regards performance, the machine is similar to the C. L. 4, but its manoeuvrability is not so good.

The machines are employed chiefly on reconnaissance work, whereas the C. L. 2 and C. L. 4 HALBERSTADT two-seaters are almost exclusively used in battle flights, for lowflying and fighting.

**NEW JUNKER ARMoured TWO-SEATER.**—The above mentioned prisoner also states that the Junker works have produced a new two-seater. The J. 2. for contact patrol work. This machine has an armoured fuselage, protecting the engine and the crew ; it is fitted with a station ary engine (probably a 200 h. p. Benz). There are small extensions on the top planes, two pairs of struts on either side of the fuselage, and ailerons on top and bottom planes ; there is no stagger.

This machine is stated to have given more satisfaction than the JUNKER J. 1. all-metal aeroplane, which was unpopular.

**OPERATIONS**

October 12, 1918.—Our pursuit planes were out early in the morning patrolling the sector ; during the course of these patrols they engaged in several combats and brought down two enemy planes.

Corps Observation Planes were also active during the morning carrying out a number of infantry contact, artillery adjustment and reconnaissance missions.

In addition a considerable amount of propaganda was dropped within the enemy's lines. In the afternoon poor visibility rendered flying almost impossible, only reconnaissance missions being carried out by our Army Observation Corps. On account of the unfavorable weather conditions there were no important observations made.

No bombing missions undertaken.

## SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

NIL

## IDENTIFICATIONS

## NOYON-RHEIMS REGION.

250th Reconnaissance Flight	Sissonne area. Aug. 27. Document, R. A. F. ....	Last identified at Mont-Notre-Dame on July 6, 1918.
287th Reconnaissance Flight	Laon area. Sept. 12. Document, R. A. F. ....	Last identified with 7th German Army in same region on July 15, 1918.

NOTE.—Both of the above flights have probably moved further back in the same region since the recent advance.

## AIRDROMES

NIL

## ENEMY AERIAL ACTIVITY

October 13, 1918—Hostile planes were very inactive.  
Ten balloons reported in ascension.

## TRANSLATION OF A GERMAN DOCUMENT

Precaution against daylight attacks by enemy airmen on aerodromes and communications.

(FROM R. A. F. SUMMARY OF AIR INTELLIGENCE OF OCT. 8, 1918).

The enemy has lately carried out attacks with bombs and machine gun fire on our aerodromes and communications with extraordinarily strong formations (40 to 50 machines) flying at low heights ; in some instances he has met with success. At present, the reinforcement of the small number of pursuit units attached to the Army or of other means of defence cannot be considered.

In the interests of efficient defence against these attacks, the following precautions will therefore be taken.

1. In the case of massed attacks carried out by enemy airmen during the daytime, anti-aircraft guns will not direct aimed fire at machines, but will put up a barrage at the height at which the attacks is taking place, increasing the rate of fire as much as possible. Machine guns will engage the aeroplanes with aimed fire, according to the instructions for firing on aeroplanes.

## AIRCRAFT WARNINGS:

2. When strong enemy formations (over 30 machines) cross the lines, the aircraft reporting centres will inform all traffic centres (e. g., railway stations and ammunition dumps), as well as all aerodromes, of the possibility of an attack by enemy low-flying airmen ; the code word "Lukas" will be used to ensure rapid communication.

All aircraft units will, in addition, be warned by their aerial protection officers, who will send out the warning "Lukas" by wireless. The aerodrome W. T. stations will, therefore, be in readiness to receive on the wave-length for aerial protection (300 metres), as far as their other duties permit.

3. On receipt of this warning, preparations for action against aerial attacks will be made immediately, but the precautions themselves (ordering troops into dug-outs, etc.) will only be carried out when the responsible commanding officer arrives at a decision based on personal observation.

## SPECIAL PRECAUTIONS FOR THE PROTECTION OF AERODROMES.

1. It is not possible to make special allotments of revolver guns or anti-aircraft machine guns from Army stocks. The Army Staff Officer for Machine Guns will, however, allot 2 or 3 light machine guns to each aerodrome. The personnel for these guns will be found by Army units, and will be sent to the Searchlight School at Lichtervelde for training in anti-aircraft machine gun work. The Fourth Army Aviation Commander will arrange direct.

2. Corps will ascertain whether certain anti-aircraft guns can be placed nearer aerodromes, in order to ensure better local protection of the latter, without prejudice to their other duties.

3. When housing aeroplanes, they should be widely distributed on aerodromes, and the empty groups of sheds available at present should be made use of as much as possible. Officers commanding units are responsible for having trenches dug near hangars and workshops, and also for thorough and strict organization of the warning and defence services.

When carrying out extensions on aerodromes, sheds and workshops should be scattered as much as possible. Epaulments should be constructed.

4. In order to split up attacks by low-flying airmen, dummy machines will be placed on unoccupied aerodromes and also in front of empty groups of sheds on occupied aerodromes, and their position will be frequently changed. Fourth Army Aviation Commander will arrange details.

In addition, Corps will see that, during good weather, machines land on unoccupied aerodromes and remain there for some time.

5. The Guard Reserve Corps will experiment with smoke clouds on aerodromes, and will report results as soon as possible.

For the Chief of the General Staff,  
(Signed) HUMSE,  
Major.

#### TRANSLATION OF A GERMAN DOCUMENT

##### Improvement of defense

(FROM R. A. F. SUMMARY OF AIR INTELLIGENCE OF OCT. 9, 1918.)

1. MACHINE GUNS.—The enemy fires at aircraft far more than we do.

The fear of giving away the machine gun emplacements prevents our men from opening fire.

All heavy machine guns and, when possible, light machine guns, should be mounted on posts near their usual position.

All the machine guns of the artillery should also be employed.

Fire may be opened only under the orders of an officer.

Concentrated rifle fire may also lead to success, but only at very short ranges. The enemy's aeroplanes are not armoured. The infantry must not refrain from firing at enemy machines through fear of being seen. Every man must be convinced that it is much easier for him to hit the aeroplane than it is for the latter to discover the small target the man offers on the ground.

Fire may, however, only be opened on the orders of an officer, except when a machine has clearly revealed its identity by dropping bombs or firing machine guns.

In back areas, enemy airmen fly too high to allow of effective rifle fire.

2. ANTI-AIRCRAFT GUNS.—The number of anti-aircraft guns is to be increased, but it cannot be hoped that we shall be able to keep pace with the increase in enemy aeroplanes. Field artillery will, therefore, be trained, and will take over its own protection when in rest.

Courses of instruction in auxiliary anti-aircraft defence work have already been arranged for by the Army, and divisions may at any time forward application for training at such courses.

Auxiliary anti-aircraft guns will not be as effective as the special guns. They will, however, prevent the enemy's airmen from flying low and using their machine guns on camps, etc.

3. SEARCHLIGHTS.—When siting searchlights, it should be borne in mind that apart from protecting, they betray positions. At the same time, important objectives must be protected by searchlights, although the enemy will thus be assisted in finding his target. Searchlights must be sited away from the objective, if possible in rows. Their radii of action must overlap, and organization must be in depth. They are very effective in close cooperation with machine gun and anti-aircraft defences.

4. AIRCRAFT.—The best means of defence against enemy airmen are our scouts, which are also steadily being reinforced. Their numbers will, however, never equal the enemy's strength in fighting machines. It is only by concentrating strong scout forces on certain parts of the front that the enemy's reconnaissance and fighting activity can be curtailed. As a result, troops in quiet sectors will frequently have the impression that they are not being protected; they must rely on defence from the ground against their most dangerous air opponent, the low-flying machine.

In order to organize an efficient system of protection from air attacks, all Corps and L. of C. Headquarters will detail a Staff officer who will draw up plans for the proposed work and see that it is properly carried out. At Army Headquarters, Section Id is allotted this task. Corps and L. of C. Headquarters will forward reports by the 1st October showing what arrangements are proposed in the different billeting areas, and by what date work will be completed.

The Army Commander.  
(Signed) VON BELOW,  
General of Infantry.

#### OPERATIONS

October 13, 1918—On account of unfavorable weather conditions only slight activity on the part of our aviation.

During the afternoon one hostile balloon was brought down in flames directly N. of Andevanne.

SUMMARY OF AIR INFORMATION

CHANGES IN LOCATION OF UNITS

ARGONNE-MOSELLE REGION

9th Bombing Squadron..... Cosnes (S. W. of Longwy). Sept. 26. New formation.  
Report, R. A. F.....  
NOTE.—See further information on this squadron below.

IDENTIFICATIONS  
NIL.

AIRDROMES

ARGONNE-MOSELLE REGION

	Change in accommodation.			Present accommodation.		
	Hangars.	Sheds.	Capacity.	Hangars.	Sheds.	Capacity.
1. <i>Airdrome considered abandoned on account of recent advance:</i>						
401. Landreville.....	—6	..	—12	0	0	0
2. <i>Reported airdrome requiring confirmation by photograph:</i>						
2143. Conflans N. W. 3 uncamouflaged hangars reported 26-9-18.						

MOSELLE-VOSGES REGION.

1. *Reported airdromes requiring confirmation by photograph:*
- 2142. Dansenberg. Airdrome reported under construction, south of village, 25-9-18. (4 klm. S. of Kaiserlautern).
  - 2164. Frankenthal (10 klm. S. of Worms). Reported 6-10-18. Document.
  - 2131. Ham (8 klm. East of Boulay). Reported 14-10-18.
  - 2162. Weiterstadt. (4 klm. N. W. of Darmstadt). Reported 6-10-18. (Document).
  - 2163. Worms (15 klm. N. of Mannheim). Reported 6-10-18. (Document).

VOSGES-SWITZERLAND REGION

1. *Reported airdrome requiring confirmation by photograph:*
- 2165. Rheinau (20 kilm. N. E. of Schlestadt). Reported 6-10-18 (Documents).

9th BOMBING SQUADRON

(FROM R. A. F. SUMMARY OF AIR INTELLIGENCE, OCT. 13, 1918)

A reliable report shows that a new formation bombing squadron arrived at Cosnes (S. W. of Longwy) on the 26th September. On the 5th September, it was reported from a different source that an airdrome was in course of preparation at Cosnes and was shortly to be occupied.

From various prisoners' statements, the formation of the 9th Bombing Squadron at Paderborn, in Westphalia, had been definitely established, but it had not yet been identified at the front.

The new squadron now at Cosnes is therefore probably the 9th, which, it is assumed, consists of the 28th, 29th and 30th Bombing Flights. (Further confirmation is required).

ENEMY AERIAL ACTIVITY

October 14, 1918.—Some activity of enemy planes on our left consisting mainly in flying at low altitudes over our front lines and firing on our troops with machine guns. Very little aerial activity on the rest of our front.

Only a few hostile balloons reported in ascension during the day.

PHOTOGRAPHS OF GERMAN PLANES

NO. 3 OF THE SERIES  
(PHOTOGRAPH ATTACHED)

RUMPLER BIPLACE BIPLANE

TYPE C IV

MAXIMUM SPREAD.—41 ft.  
OVERALL LENGTH.—26 ft. 9 in.  
TOTAL MAIN PLANE AREA.—353 sq. ft.

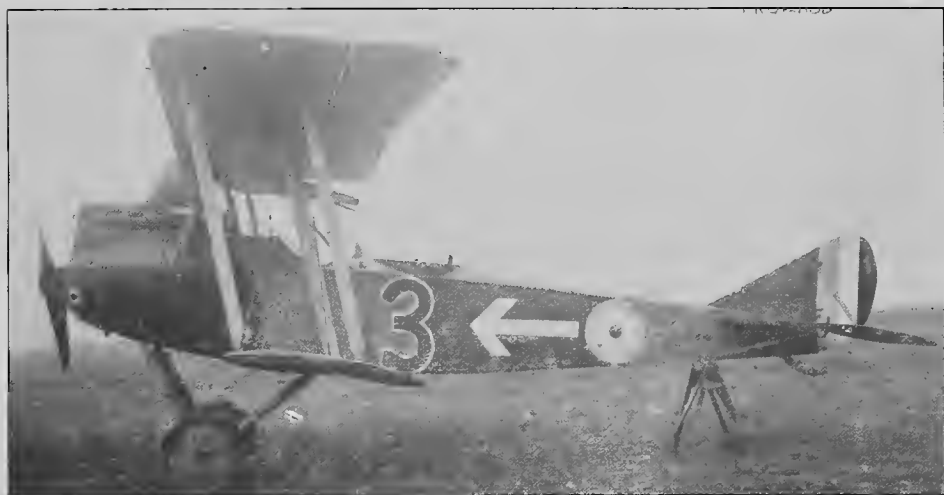
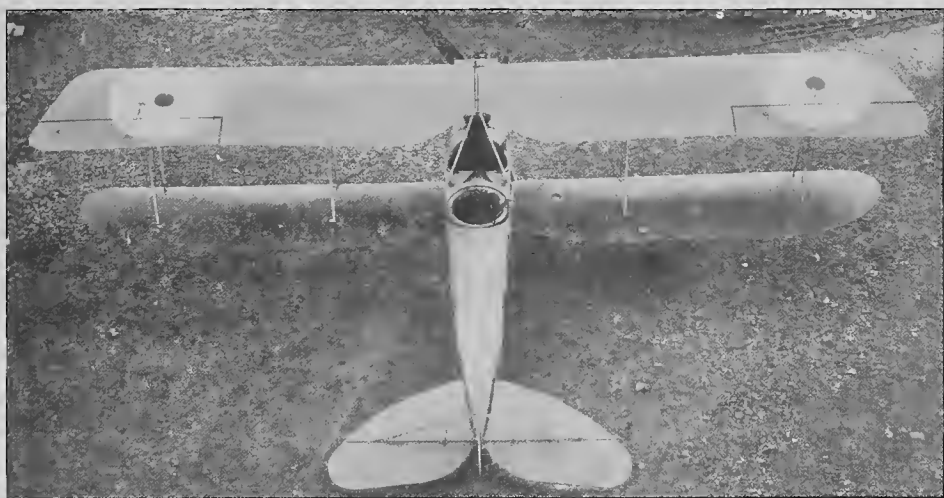
WING SHAPE.—Top plane is slightly cut back and both planes have sweepback and dihedral. There is no overhang. Trailing corners of lower wings are cut away both at tips and at fuselage. Gap is noticeably large on this machine. There are two sets of parallel interplane struts on each side of the fuselage.

AILERONS.—On upper plane only and are not balanced.

RUDDER.—Between the two elevators and not balanced. Is practically the same shape as that of the "D. F. W."

ELEVATORS.—With fixed tail plane form a tail structure of "fish tail" shape.  
Elevators are not balanced.





**RUMPLER BIPLACE**  
**TYPE C 4**



**FUSELAGE.**—Of curved section at front but changing to rectangular at pilot's cockpit. Pilot's forward view is obstructed by semi-circular radiator hung from leading edge of upper central section. Principal gas tank under pilot's seat.

**ENGINE.**—Maybach 6 cylinder 260 H. P. (Some machines of this type are equipped with Mercedes 260 H. P. or Benz.)

**ARMAMENT.**—One Maxim machine gun firing through the propellor for pilot, and one Parabellum mounted on observer's turret.

<b>WEIGHT.</b> —Plane and Engine .....	2382 lbs.
Fuel .....	418 "
Load .....	680 "
Total .....	3480 "

**PERFORMANCE.**—Climbs to 16,000 ft. in 30 minutes. Speed at 10,000 ft., 104 miles per hour, at 16,000 ft., 93 miles per hour. For this size of machine the performance is exceptionally good both as to climb and speed at altitudes which makes this machine very useful for long distance reconnaissance work.

#### GERMAN AIRPLANES

A Hanover forced down recently near Varennes was of the type C L 3a. This type is very similar to the C L 2, but the 2 vertical struts and cross-bracing wires of the biplane tail have been eliminated and in their place have been substituted diagonal steel braces running from the lower surface of the upper plane to the stern post of the fin. This arrangement permits the observer to fire through the tail with less danger of damage to the structure. The limit of useful loading (according to figures painted on the fuselage) has been raised from 540 lbs. to 790 lbs. In conjunction it is interesting to note that a very rough wooden bomb rack had been built into the front of the observer's cockpit of this machine, capable of holding 4-25 lb. bombs. There was no releasing arrangement and these bombs would necessarily be dropped by hand through the trap in the floor of the observer's cockpit.

#### OPERATIONS

October 14, 1918.—Visibility very poor. A few low flying patrols and infantry contact missions carried out during the day.

Bad weather prevented our Army Squadrons from operating.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### FLANDERS REGION

26th Battle Flight.....	With 4th German Army. Aug. 2. Document, French source.....	Last identified in Noyon-Rheims region, June 24, 1918.
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### LYS-VIMY REGION

229th Reconnaissance Flight .	With 6th German Army. Sept. 22. Document, French source.....	Last identified in Vimy-Combles region, Sept. 17, 1918.
256th Reconnaissance Flight	With 6th German Army. Sept. 29. Document, French source.....	Last identified in Rheims-Argonne region, July, 1918.

### VIMY-COMBLES REGION

240th Reconnaissance Flight	Cambrai. Sept. 25. Prisoner's statement, American source.....	Last identified in Noyon-Rheims region, Aug. 12, 1918.
15th Battle Flight.....	Marly (E. of Valenciennes). Oct. 13. Machine down, R. A. F.....	Last identified in Flanders region, Aug. 11, 1918.

### COMBLES-NOYON REGION

212th Reconnaissance Flight .	Guisse area. Aug. 27. Document, R. A. F.....	Recent identification in Vimy-Combles region was incorrect. This flight had not left the Combles-Noyon region.
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### RHEIMS-ARGONNE REGION.

41st Reconnaissance Flight ..	With 3rd German Army. Sept. 21. Document, French source.....	Last identified in Noyon-Rheims region, March 25, 1918.
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### MOSELLE-VOSGES REGION

28th Pursuit Flight ,.....	Metz area. Oct. 5. Document, French source .....	Last identified in Lys-Vimy region, Aug. 1, 1918.
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## IDENTIFICATIONS

### ARGONNE-MOSELLE REGION

44th Reconnaissance Flight ..	Thonne-les-Pres. Oct. 4. Prisoner's statement, American source.....	Last identified at same place, Sept. 2, 1918.
279th Reconnaissance Flight .	With Army Detachment C. Sept. 26. French source .....	Last identified at Porcher (same region, Aug. 4, 1918.

### MOSELLE-VOSGES REGION

199th Reconnaissance Flight .	Bensdorf. Sept. 19. Document, French source .....	Last identified at Marimont (same region), Aug. 14, 1918.
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## AIRDROMES

NIL

## ENEMY AERIAL ACTIVITY

October 15, 1918.—Enemy aviation inactive throughout the day, only a few pursuit and reglage planes observed over the battle area.

Hostile balloon between BEFFU and BRIQUENAY came down in flames at 15:14.

## COMBING OUT IN THE GERMAN AIR SERVICE

FROM R. A. F. SUMMARY OF AIR INTELLIGENCE, OCT. 14, 1918

A prisoner states that in July last there were some 80,000 men at the recruit depot at Beverloo who had been combed out from the Air Service and a few other units. These men were posted to units in the field after six weeks' training.

## NEW TYPES OF AIRCRAFT

FROM SUMMARY OF TECHNICAL AIR INTELLIGENCE, OCT. 3, 1918

**NEW MONOPLANE.**—The following details have been received regarding a monoplane recently met in combat near Zeebrugge :—

**Fuselage** is round streamlined monocoque, very wide at the cockpit and tapering to the tail. The fuselage is very long in comparison with the wing span.

**Wings.**—The wings are about two-thirds up from the bottom of the fuselage ; the span is estimated at 18-20 feet. The chord is very deep in proportion to the span. The wing tips are semi-circular. Ailerons are fitted.

**Tailplane** is trapezoidal in shape and fitted with a fin. The rudder is not balanced.

**Armament.**—Two synchronized machine guns are fitted which are stated to be mounted low down.

**Engine.**—Rotary.

**Performance.**—The speed and climb are said to be good ; the manœuvrability poor.

**NOTE.**—This information is given with reserve ; but there have been several reports recently to the effect that experiments with monoplanes have been carried out at both the Friedrichshafener and Siemens Schnuckert Works, and that from the Friedrichshafener Works is said to be very small. In addition, the Oberursel Co. have started to advertise their rotary engines as for biplanes and monoplanes.) (C. 165).

Confirmation of above plane is requested. Information obtained in regard to any other new types desired. If obtained, address G-2, A-7, G. H. Q., American E. F.

### NIGHT RECONNAISSANCES

FROM R. A. F. SUMMARY OF AIR INTELLIGENCE, OF OCTOBER 12, 1918

A captured document, emanating from the C. G. S. of the Field Army, dated the 3rd September, 1918, shows that the enemy attaches considerable importance to air reconnaissance by night.

The following is the translation of some extracts from this document :—

The object of night reconnaissances is to provide information to the Higher Command regarding the trend and extent—usually considerable when operations are impending—of any movement behind the enemy's lines under cover of darkness. During operations, the battle field should be patrolled by night reconnaissance machines.

Useful and reliable reports can only be expected from observers, who, having worked over an area for a long time, know the country well.

At night, roads, railways and large water courses are the best landmarks ; familiarity with the enemy's night lighting arrangements is also of assistance, whilst our own lights and anti-aircraft signalling stations ("onions") help on the return journey.

The altitude at which a reconnaissance is carried out depends on visibility ; in order to recognize details by vertical observation, it is necessary to fly very low. Good visibility is attained by flying away from the moon.

By allotting clearly defined reconnaissance areas to individual machines flying at fixed times, it will be possible to obtain reports covering practically the whole night.

If it is not possible to reconnoitre railway lines, roads and water-courses for movement by repeatedly flying along their whole length, one reconnaissance should be carried out between midnight and 3 a. m., as the beginning or end of any important movement will take place during that period. The direction of railway movement and the activity at stations can be recognized by the glare from locomotives and the white smoke issuing from them. Size and nature of train movements and of entraining or detraining operations can only be observed by machines flying at a low altitude. Increased activity at stations can be recognized by the unavoidable increase in lights on sidings and platforms.

Troop movements and traffic on treeless roads and over open country can not escape an observer's attention. On roads bordered by trees, in villages, and in country affording facilities for cover, however, aeroplanes will have to fly low, when, as experience has shown, even the slightest movement can be detected.

When ordering reconnaissances for concentrations of troops, camps, billets and aerodromes, individual machines should not be allotted too large an area. Detailed instructions as to roads of approach of columns and assembly areas, based on photographic and visual observations by day, should be issued to observers reconnoitring for concentrations of troops. We have so far had little experience as regards this, especially concerning the possibility of detecting the assemblies of tanks.

Trenches are easily found at night, and it should also be possible to detect working parties, although this cannot be definitely stated, as we have had no experience.

Night reconnaissance machines will be sent out singly in order not to attract the enemy's attention, which would cause him to extinguish lights and alarm his defences. It is recommended that machines should cross the lines at great heights, and then glide down ; it may also be advisable to fly with the engine throttled down. Machine guns should only be used for self-defence or when there is a chance of causing serious losses to the enemy. A machine which limits itself to reconnoitring may sometimes be taken by the enemy for one of his own aeroplanes.

The best type of machine, as low flying is necessary, is a two-seater. Twin-engine machines, although permitting a heavier load of bombs to be carried, have the disadvantage of making too much noise.

Parachute flares are very useful for night reconnaissance.

As regards the enemy's defensive measures against night reconnaissance machines, complaints received are chiefly concerned with the blinding effect of searchlights, which may render all reconnaissance impossible ; anti-aircraft and machine gun fire has not been heavy.

An organization for night reconnaissances, involving special equipment of units, is under consideration. All concerned will be informed.

(Signed) LUDENDORFF.

The units carrying out night reconnaissances are probably exclusively night bombing squadrons, most of which possess two-seater machines.

Night patrolling of a battlefield will probably be done by reconnaissance flights.

### OPERATIONS

October 15, 1918.—In spite of the poor visibility, Corps Observation Planes identified the front lines and carried out a few reconnaissance and reglage missions. During the course of these flights one hostile plane was brought down in enemy territory.

Our pursuit planes carried out a number of patrols during the day.

Our army Squadrons were inactive.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### NOYON-RHEIMS REGION

31st Pursuit Flight.....	Laon area. Aug. 31. Document, R. A. F.....	Last identified in Rheims-Argonne region, July 28, 1918.
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## IDENTIFICATIONS

### RHEIMS-ARGONNE REGION

270th Reconnaissance Flight.	Unlocated in sector. Oct. 1. Machine shot down, R. A. F.....	Last identified at Rethel (same region), June, 1918.
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## AIRDROMES

Nil.

## 3rd PURSUIT SQUADRON

FROM R. A. F. SUMMARY OF AIR INTELLIGENCE, OCT. 15, 1918

A formation of scouts, with noses painted yellow, was seen in Flanders on the 14th October. This is the squadron marking of the 3rd Pursuit Squadron, recently identified as working on the Douai, St. Quentin front.

All or part of the 3rd Pursuit Squadron, which consists of 4 flights, has thus apparently been diverted to the Flanders battle front; it is not known if the squadron has moved from its airdrome in the Le Quesnoy area, and it may be only temporarily accommodated at an airdrome in the Flanders sector.

## ENEMY AERIAL ACTIVITY

October 16, 1918.—Outside of the few low flying planes reported on the extreme left of our sector there was very little activity of enemy aviation.

No hostile balloons observed.

## OPERATIONS

October 16, 1918.—Poor visibility and rain prevented important work on the part of our squadrons.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### VIMY-COMBLES REGION

4th Battle Flight.....	Marly. Oct. 13. Prisoner's statement, R. A. F.....	Last identified in Combles-Noyon, region, May 3, 1918.
235th Reconnaissance Flight .	Valenciennes area. Oct. 7. Document, R. A. F.....	Last identified in Rheims-Argonne region, July 9, 1918.

## IDENTIFICATIONS

### NOYON-RHEIMS REGION

234th Reconnaissance Flight.	Laon front. Oct. 11. Document, R. A. F.....	Last identified in Sissonne area (same region). Sept. 3, 1918.
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NOTE.—This flight was then working for the 10th Reserve Division.

### ARGONNE-MOSELLE REGION

32nd Battle Flight.....	Unlocated in sector. Oct. 4. Prisoner's statement, American source.....	Last identified in Briey area (same region) Sept. 16, 1918.
37th Battle Flight.....	Thonne-les-Pres. Oct. 4. Prisoner's statement, American source.....	Last identified in Briey area (same region) Sept. 16, 1918.

## AIRDROMES

### ARGONNE-MOSELLE REGION

1. Changes in existing airdromes.	Present accommodation		
	Hangars.	Sheds.	Capacity.
19. Cosnes.	13	..	13
Now occupied. British photo. 9th Bombing Squadron reported here.			

## ENEMY AERIAL ACTIVITY

October 17, 1918.—Only a few planes reported W. of the MEUSE.  
One enemy plane brought down by machine-gun fire in vicinity of SOMMERANGE.

## EQUIPMENT AND DUTIES OF UNITS

FROM A PRISONER'S STATEMENTS IN R. A. F. SUMMARY OF AIR INTELLIGENCE, OCT. 16, 1918.

The 4th and 15th Battle Flights ("B" Battle Group) are each equipped with 8 Halberstadt two-seaters; these are all of the C.L.2 and C.L.4 types. Halberstadt two-seaters of the C.L.5 type are not to be issued to battle flights, but are to be employed solely on reconnaissance work.

The group has lately been engaged principally on the bombing of trenches and forward battery positions, by day; small bombs and hand-grenades are carried. Defensive patrols—flights flying in formation—are also occasionally carried out, but the group has not been very active for the past fortnight.

NOTE. The fact that these flights are equipped with 8 machines each is of interest; battle flights were known to have an establishment of 6 machines, and it is probable that this has now been raised, possibly to 9 machines, as was the case in some reconnaissance flights on battle fronts.

## NEW TYPES OF AIRCRAFT

FROM BRITISH SUMMARY OF TECHNICAL AIR INTELLIGENCE, OCT. 12, 1918

(I) SIEMENS SCHUCKERT SINGLE-SEATER. — A captured scout pilot states the number of these machines available is low, on account of difficulties in production. This type of Single-Seater is generally popular.

(II) ALBATROS C. XV.—The same prisoner states that this is a tractor biplane, fitted with a 200 HP. Benz engine. It is said to be similar to the Albatros C.-XII except that the wings have a forward stagger; there are two pairs of vertical type interplane struts.

Its performance is very similar to that of the D. F. W., and it is employed in artillery and close reconnaissance work. (C. 200).

NOTE. — Reference was made to this aeroplane in Summary of Technical Air Intelligence, Series 8, No 5, in an extract from a note-book found on a German prisoner.

## OPERATIONS

October 17, 1918.—Our pursuit planes carried out a number of patrols but reported nothing of importance.

A few infantry contacts and reconnaissance missions executed by Corps Observation Planes.

SUMMARY OF AIR INFORMATION

CHANGES IN LOCATION OF UNITS  
NIL

IDENTIFICATIONS  
NIL

AIRDROMES  
MOSELLE-VOSGES REGION

1. Reported airdromes requiring confirmation by photograph:  
2159. Oberheimbach (22 klm. N. of Kreuznach). Reported 6-10-18.  
2161. Russelsheim (10 klm. E. of Mainz). Reported 6-10-18.
2. Reported airdrome photographed and found not to exist;  
2153. Mettenheim.

CHANGES IN DESIGNATION OF REGIONS ON THE WESTERN FRONT

On account of the shortening of the battle line on the Western front, the following regions will be used in future Summaries of Air Information :

Flanders.  
Lys-Vimy.  
Vimy-Noyon.  
Noyon-Argonne.  
Argonne-Moselle.  
Moselle-Vosges.  
Vosges-Switzerland.

It will be noted that the Vimy-Combles and Combles-Noyon regions have been combined under the name of Vimy-Noyon Region, and that the Noyon-Rheims and Rheims-Argonne Regions have been combined under the name of Noyon-Argonne Region.

GERMAN AIRDROME ACCOMMODATIONS FROM ARGONNE TO THE SWISS BORDER,  
OCTOBER 12, 1918, AND OCTOBER 19, 1918

Region	Airdromes		Hangars		Sheds		Capacity	
	Oct. 12.	Oct. 19.	Oct. 12.	Oct. 19.	Oct. 12.	Oct. 19.	Oct. 12.	Oct. 19.
Argonne-Moselle.....	43	42	286	280	72	72	1006	994
Moselle-Vosges.....	39	39	263	263	79	79	1186	1186
Vosges-Switzerland.....	33	33	272	272	103	103	1371	1371
Total .....	115	114	821	815	254	254	3563	3551

DISTRIBUTION OF IDENTIFIED GERMAN AIR UNITS FOR WEEKS ENDING OCTOBER 12  
AND OCTOBER 19

Region.	Pursuit		Reconnaissance		Battle		Bombing	
	Oct. 12.	Oct. 19.	Oct. 12.	Oct. 19.	Oct. 12.	Oct. 19.	Oct. 12.	Oct. 19.
Flanders .....	7	7	7	7	3	2	6	6
Lys-Vimy .....	9	8	18	21	2	3	3	3
Vimy-Combles .....	14	14	17	17	2	4	3	3
Combles-Noyon .....	13	13	23	22	8	7	6	6
Noyon-Rheims .....	7	8	37	36	10	9	3	3
Rheims-Argonne .....	15	14	10	9	8	8	3	3
Argonne-Moselle .....	8	8	13	13	8	8	..	3
Moselle-Vosges .....	3	4	8	9	..	..	3	3
Vosges-Switzerland.....	5	5	9	8	..	..	..	..
Exterior Fronts .....	2	2	18	18	..	..	..	..
Unlocated .....	2	2	1	1	1	1	..	..
Total .....	85	85	163	163	42	42	27	30

Total identified flights (all classes) on all fronts, Oct. 19, 1918, 347.  
Total estimated machines belonging to such flights, Oct. 19, 1918, 2999.

ENEMY AIR ORDER OF BATTLE, ARGONNE TO SWISS BORDER, OCTOBER 19, 1918

ARGONNE-MOSELLE REGION

*Pursuit Flights.*  
12th—unlocated.  
13th—  
15th—  
18th—Bruville area (probably Conflans airdrome No. 72).  
  
19th—Unlocated.  
64th—Mars-la-Tour (before the advance).  
65th—Mars-la-Tour (before the advance).

*Reconnaissance Flights.*  
29th—West of Briey (probably Briey airdrome No. 16).  
  
31st—Doncourt (Airdrome No. 72).  
36th—Unlocated.  
37th—Doncourt (Airdrome No. 72).  
44th—Thonne-les-Pres (Airdrome No. 54).  
46th—Briey (Airdrome No. 58).  
47th—Unlocated.



67th —Marville (Airdrome No. 30).

*Bombing Flights.*

28th (?) Cosnes Cosnes (Airdrome No. 19).  
29th (?) — " "  
30th (?) — " "

*Battle Flights.*

2nd—Autrecoirt (Airdrome No. 103).  
5th—Thonne-les-Pres (Airdrome No. 34).  
20th— " "  
21st— " "  
32nd—Unlocated.  
33rd—Thonne-les-Pres (Airdrome No. 54).  
37th— " "  
45th—Briey N. (Airdrome No. 58).

*Pursuit Flights.*

28th—Metz area.  
76th—Buhl (Airdrome No. 6).  
80th—Marimont (Airdrome No. 47).  
84th—Frescaty (Airdrome No. 7).

*Reconnaissance Flights.*

12th —Many (Airdrome No. 11).  
67th —Lorquin (Airdrome No. 12).  
100th—Morhange (Airdrome No. 8).  
199th—Marimont (Airdrome No. 47).  
218th—Unlocated  
242nd—Frescaty (Airdrome No. 7).  
257th—Morhange (Airdrome No. 8).  
275th—Metz area.  
281st—Lorquin (Airdrome No. 12).

*Pursuit Flights.*

69th—Habsheim (Airdrome No. 26).  
70th—Stotzheim (Airdrome No. 89).  
71st—Habsheim (Airdrome No. 26).  
75th— " "  
76th— " "

*Home Defence Flights. i*

4-B—Fribourg (Airdrome No. 2).  
5th—Neuf-Brisach (Airdrome No. 23).  
6th— " "  
14th—Lahr (Airdrome No. 41).  
?—Karlsruhe (Airdrome No. 65).

*Bombing Flights*—None.

206th—Unlocated.

215th—Probably at Buzancy (Airdrome No. 400).

246th—Briey (Airdrome No. 58).  
274th—Stenay (Airdrome No. 57).  
279th—Porcher (Airdrome No. 59).  
280th—Thonne-les-Pres (Airdrome No. 34).  
296th—Conflans area.  
298th—Buxieres (before the advance).

*Mosaic Section.*

Army Detachment C. Briey (Airdrome No. 16).

MOSELLE-VOSGES REGION

*Bombing Flights.*

25th—Boulay (Airdrome No. 61).  
28th—Boulay " "  
27th—Boulay "

*Battle Flights*—None.

*Home Defence Flights.*

1st—Bitche (Airdrome No. 107).  
2nd—Folpersweiler (Airdrome No. 60).  
3rd—Morhange (Airdrome No. 8).  
8th—Bitche (Airdrome No. 107).

VOSGES-SWITZERLAND REGION.

*Reconnaissance Flights.*

4th—Hagenau (Airdrome No. 55).  
10th—Schlestadt (Airdrome No. 4).  
43rd— " "  
214th— " "  
243rd—Colmar (Airdrome No. 28).  
267th—Habsheim (Airdrome No. 26).  
282nd—Sierentz (Airdrome No. 27).  
289th—Habsheim (Airdrome No. 26).

*Mosaic Sections.*

4th—Altdorf (Airdrome No. 88).

*Battle Flights*—None.

ENEMY AERIAL ACTIVITY

October 18, 1918.—There was a great increase in enemy aviation due to improved weather conditions

Hostile pursuit planes showed the greatest activity between the Aisne and the Meuse, over 200 planes being reported in this region. Between the Meuse and Frenches they were less active, but still slightly above normal.

A number of reglage and reconnaissance planes were observed along our sector during the day but were much less active than the pursuit planes. Late in the afternoon an enemy plane (with Allied markings) dropped bombs on one of our battery positions N. E. of Nantillois. Very few hostile balloons reported in ascension.

OPERATION

OCTOBER 18, 1918. Our pursuit planes maintained patrols over our sector throughout the day. They also furnished protection for bombing units, which bombed BAYONVILLE, BUZANCY and REMONVILLE, dropping a total of about 4 1/2 tons of bombs on these towns.

There were 25 contacts during the day and 14 hostile planes are believed to have been brought down. Corps Observation Planes were also very active and carried out a number of reconnaissance, infantry liaison and artillery surveillance missions. They also took a few photographs.

Our Army Observation Group made six visual reconnaissance missions. They also took a few photographs.

Our Army Observation Group made six visual reconnaissance flights over the enemy's rear area.

# **SUMMARY OF AIR INFORMATION**

## **CHANGES IN LOCATION OF UNITS**

Nil

## **IDENTIFICATIONS**

Nil

## **AIRDROMES**

Nil

## **UNCONFIRMED IDENTIFICATION**

In an enemy plane recently brought down in the St. Mihiel area, the pilot and observer were both dead. One of these men had his identification tag marked "Ravarian Flieger Abterlungen 35." This flight was last identified on the Russian front on May 31, 1918. This may possibly indicate that this unit is now in the Conflans area but cannot be taken as an actual identification as this may be a false tag or the pilot may have been transferred from the 35th Reconnaissance Flight to some other unit now on the Western front.

## **AMERICAN AVIATOR CITED IN GERMAN PUBLICATION FOR NOT GIVING ANY INFORMATION**

A German aviator, made prisoner recently, states that an American aviator, who was captured, refuses to disclose any information whatsoever. His constant refusal to answer questions created such an impression that the German military authorities published this fact as an example for their own aviators.

## **ENEMY AERIAL ACTIVITY**

October 19, 1918.—Enemy pursuit planes fairly active between the Aisne and the Meuse ; two groups of pursuit planes reported east of the Meuse.

On part of our front considerable activity was shown in making shallow reconnaissances ; only a few reglage planes observed during the day.

Hostile balloons showed fair activity.

## **OPERATIONS**

October 19, 1918.—Pursuit planes carried out their usual patrols during the course of which they engaged in seven combats ; two enemy planes were brought down out of control.

Our corps observation planes made several reconnaissance flights and reported on the location of our front line.

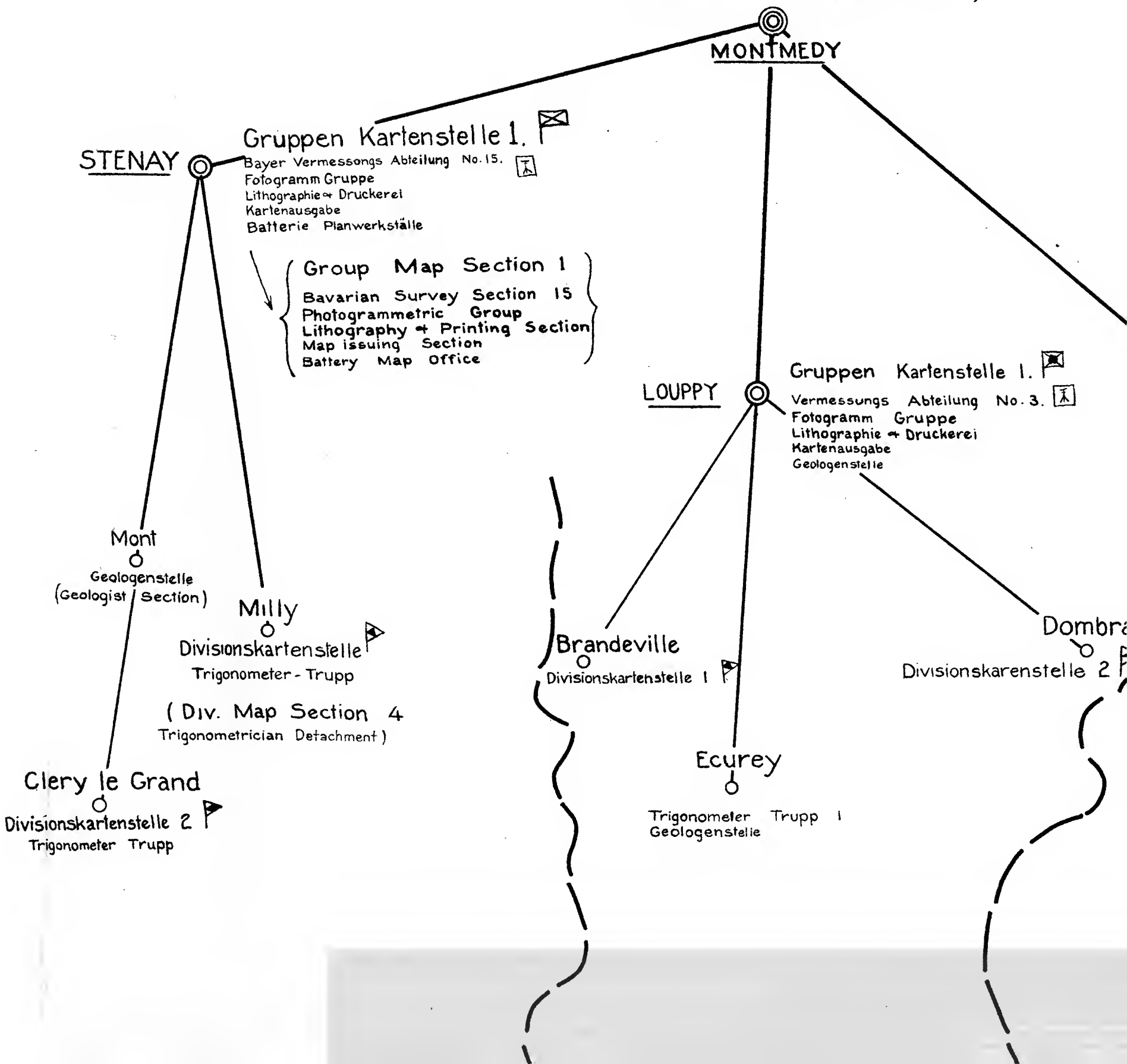
Army squadrons were inactive.

# Gliederung der Vermessungstruppen der 5. Armee.

Stand Ende April. 1918.  
(Position at the end of April 1918)

STOVERM 5					
Zentrale des Vermessungsdienstes					
Armee	Trigonometrische Gruppe	Armee	Kartographische	Lithographie	
"	Topograph	"	Hochbildanfertigung		
"	Fotogramm	"	Kartendruckerei		
"	Raumbild	"	Kartenausgabe		
"	Lichtbildanstalt	"	Geologen Gruppe		

Cen  
Army  
Trigonometrische  
Topographische  
Photogrammetrische  
Still  
Movir



# STOVERM 5

## Zentrale des Vermessungsdienstes

Armee	Trigonometrie Gruppe	Armee	Kartographie Lithographie
"	Topograph "	"	Hochbildonfertigung
"	Fotogramm "	"	Kartendruckerei
"	Raumbild "	"	Kartenausgabe
"	Lichtbildanstalt "	"	Geologen Gruppe

# Staff Officer for Survey

## Central Office of Survey Service

Army	Trigonometry Group	Army	Cartography & Lithography
"	Topography "	"	Development Section
"	Photogrammetry "	"	Map Printing "
"	Still Photograph "	"	Map Issuing "
"	Moving Picture Establish.	"	Geologist Group

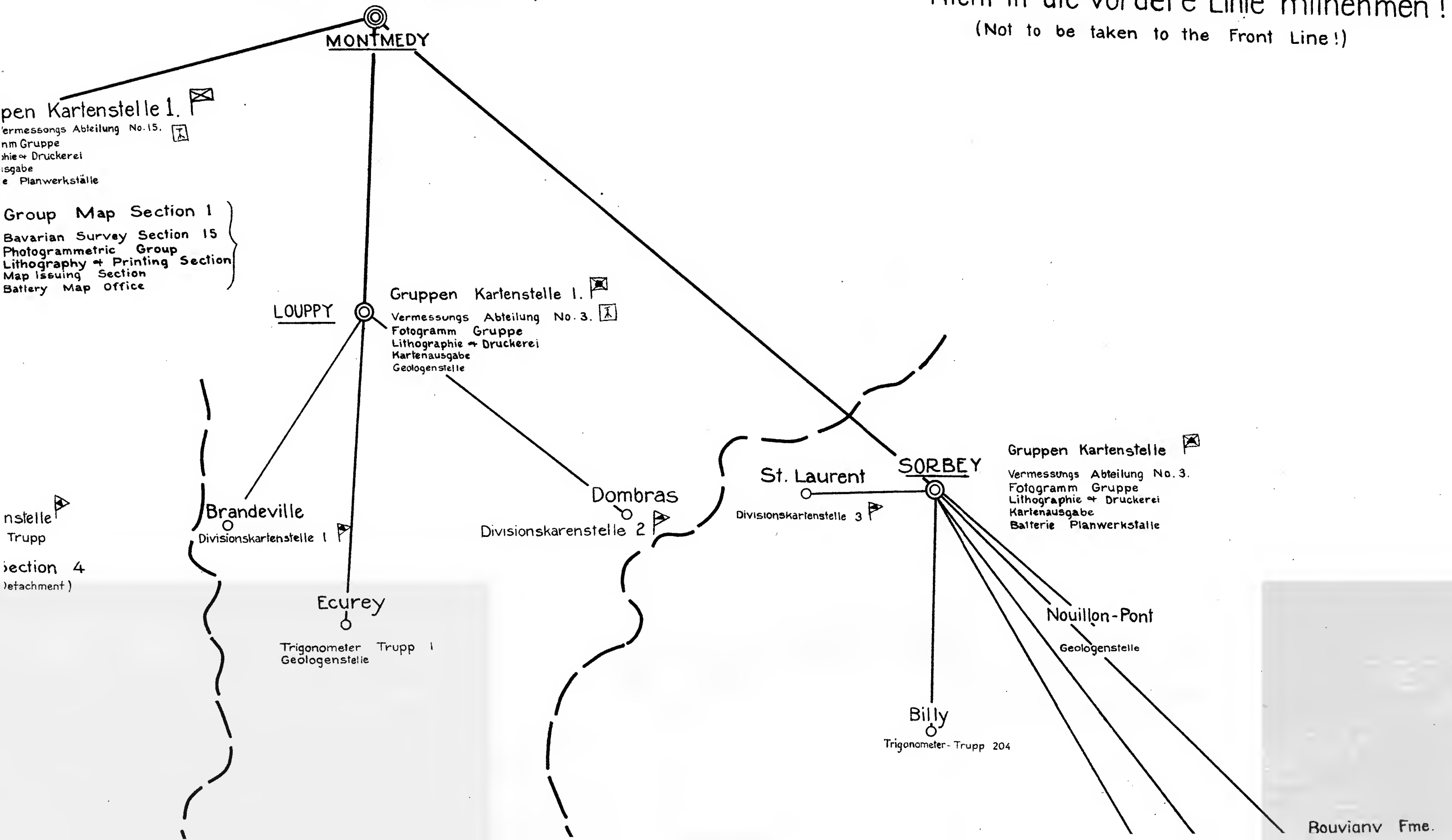
# Geheim!

(SECRET)

40

(40)

Nicht in die vordere Linie milnehmen!  
(Not to be taken to the Front Line!)



3.  
Armee.

Armee -  
Grenze (Limit)

Clery le Grand  
Divisionskartenstelle 2  
Trigonometer Trupp

(Geologist Section)  
Milly  
Divisionskartenstelle  
Trigonometer - Trupp  
(Div. Map Section 4  
Trigonometrician Detachment)

Brandeville  
Divisionskartenstelle 1

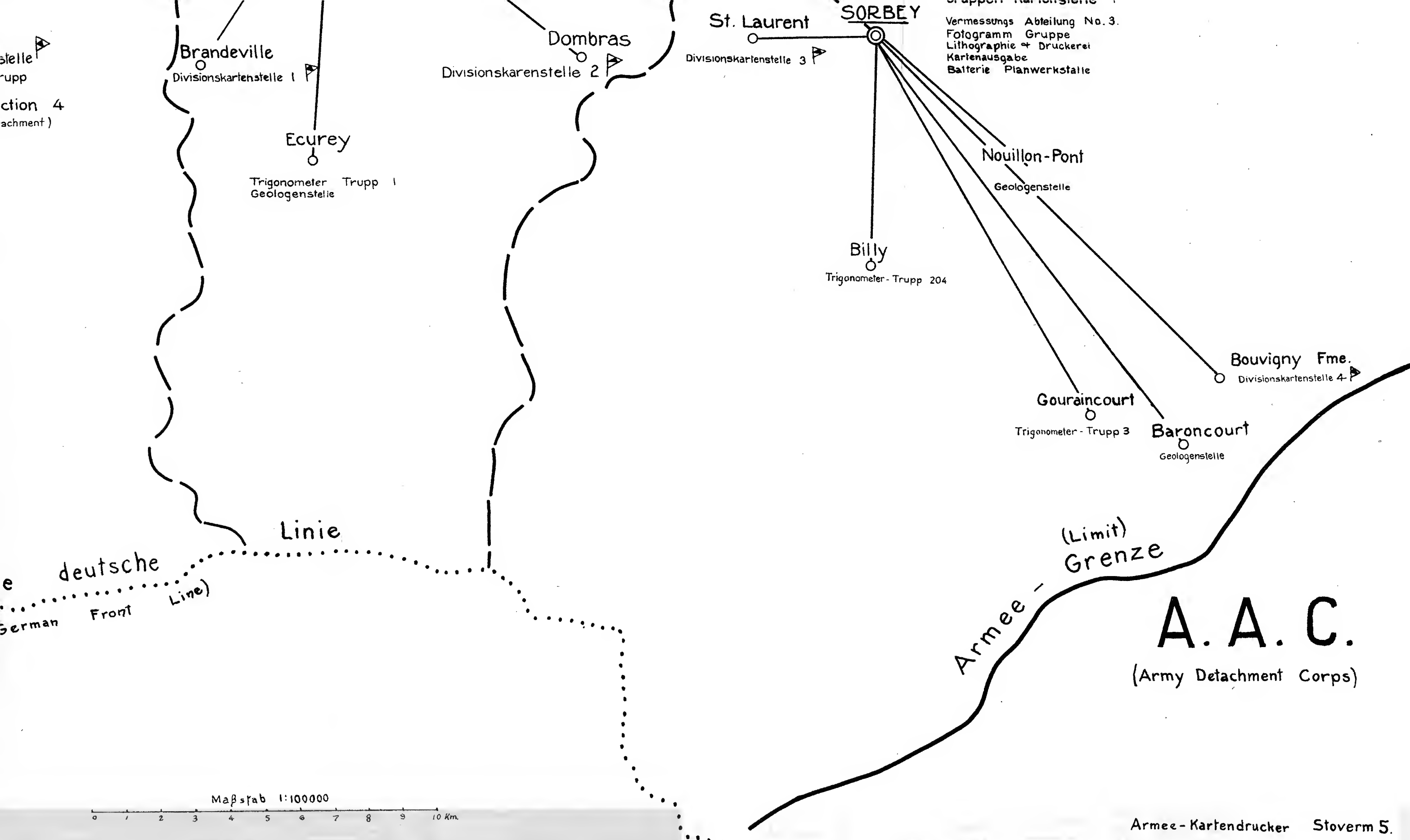
Ecurev  
Trigonometer Trupp 1  
Geologenstelle

Dombras  
Divisionskartenstelle 2

Vordere deutsche  
(German Front Line)

Linie

Maßstab 1:100000  
0 1 2 3 4 5 6 7 8 9 10 Km.



# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### VIMY-NOYON REGION.

18th Reconnaissance Flight... Douai area. Sept. 17. Document, R. A. F. .... Last identified in Lys-Vimy region, Sept. 10, 1918.

### ARGONNE-MOSELLE REGION.

203rd Reconnaissance Flight. Montmedy. Oct. 18. Machine down, American source ..... Last identified in Flanders region, Oct. 9, 1918.

NOTE.—Identification in Flanders region was probably incorrect, as this flight was identified in the St. Quentin area on Apr. 5, May 4, May 27, June 1, July 27 and Aug. 18. This is in accordance with the prisoner's statements.

## IDENTIFICATIONS

### ARGONNE-MOSELLE REGION.

5th Battle Flight.....	Virton. Oct. 19. Prisoner's statement, American source.....	Last identified at Thonne-les-Pres (same region), Oct. 2, 1918.
20th Battle Flight.....	Virton. Oct. 19. Prisoner's statement, American source.....	Last identified at Thonne-les-Pres (same region). Oct. 2, 1918.
21st Battle Flight.....	Virton. Oct. 19. Prisoner's statement, American source.....	Last identified at Thonne-les-Pres (same region), Oct. 2, 1918.
32nd Battle Flight.....	Virton. Oct. 19. Prisoner's statement, American source.....	Last identified in Briey area (same region), Sept. 16, 1918.

NOTE.—Prisoner states that this flight was recently at Thonne-les-Pres and moved from there to Virton.

45th Battle Flight.....	Unlocated in Argonne-Moselle region. Oct. 19. Prisoner's statement, American source.	Last identified at Briey (same region), Sept. 17, 1918.
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NOTE.—Prisoner states that this flight was recently at Thonne-les-Pres but has now left that airdromes.

### MOSELLE-VOSGES REGION.

26th Bombing Flight.....	(8th Bombing Squadron). Boulay. Aug. 19. Document, R. A. F. ....	Last identified at same place, July 27, 1918.
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## AIRDROMES

NIL

## ENEMY AERIAL ACTIVITY

October 20, 1918.—A few shallow reconnaissances over the right of our sector. No balloons in ascension.

## GERMAN CLAIMS

FROM R. A. F., SUMMARY OF AIR INTELLIGENCE, OCT. 19, 1918.

A captured pilot (sergeant) ridicules the claims put forward monthly in the German Communique, as to the number of Allied machines shot down and the number of aeroplanes lost by the Germans. He states that, if the figures were divided by three in the case of Allied and multiplied by three in the case of German machines lost, they would be more approximately correct.

The prisoner has been punished on two occasions for "doubting the official German claims."

## INTERROGATION OF A PILOT BELONGING TO THE 203rd RECONNAISSANCE FLIGHT, AND HIS PASSENGER, AN ARTILLERY OFFICER

1. The machine, a Rumpler C. 4 with 260 HP. Mercedes motor, was brought down in the Bois de Vigneulles by French anti-aircraft fire at 4 P. M., Oct. 18, 1918. The pilot, who was unfamiliar with the neighborhood, and not having a map of the entire region, lost his way in the mist and had to rely on the passenger for direction. They crossed the lines at an altitude of 100. 150 meters and had to land on account of the gasoline tank being pierced and the engine stalling. The pilot succeeded in making a landing without causing further damage to the machine.

2. The pilot, a N. C. O., claims he belongs to the 203rd Reconnaissance Flight which he joined three weeks ago. Previous to this time he was at the Army Aircraft Park No. 18 at La Capelle. He had just completed a six week's course of training at the park, after undergoing a six month's course at the Flying school at Grossenhain, Saxony. Prior to joining the Flying Corps, he had served with the L. I. R. 104 then in the L. I. Div. 47, in Russia.

3. The passenger, a first lieutenant of the Austro-Hungarian Heavy Artillery Regiment 7, 1st Bn., 13th Battery, stationed near the airdrome, was permitted to take his first ride, which was to be a short excursion.

4. The prisoners claim that the 203rd Reconnaissance Flight is located at an airdrome at the southern edge of Montmedy. The pilot was told that the flight had been in the region of St. Quentin before coming to Montmedy. The airdrome is made up of 4 hangars, each able to accommodate two machines.

5. The flight has 6 machines, 5 L. V. G. and the Rumpler C. 4 that was brought down. As a rule, the Rumpler is armed with two machine guns but it left unarmed on this trip because it was not intended

to go near the lines. The pilot states that each Observation Flight usually has a single-seater battle plane but that this flight had none while he was there. He also states that observation planes usually carry four 12-kilo bombs to be thrown by hand by the observer. The captured Rumpler had a light blue body with camouflaged wings and the prisoner states that the L. V. G. s have yellow bodies with camouflaged wings.

6. The 203rd Reconnaissance Flight is commanded by Capt. Donnevert. There are 6 other officers and 6 N. C. O. pilots with the flight. Each plane has 3 mechanics assigned to it. The entire personnel of the flight is about 100.

7. The flight belongs to the "Maas Gruppe Ost" and is under the direct command of the Gruff. Its chief duty is to register for the artillery but occasionally it is sent out to take photographs. The pilot believes that the two other observation flights at the disposal of the "Maas Gruppe Ost" are located at Thonne-les-Pres.

8. The pilot claims that the Rumpler C. 8 is equipped with an Argus motor. This type is not being used at the front because it is not a success. The Rumpler planes are very unpopular with the pilots and have the reputation of being very dangerous and responsible for many accidents. He claims that the machine has a tendency to slip into a nose dive from which it is almost impossible to right it. While the Rumpler is a good climber at low altitudes, it is very difficult to climb the machine at higher altitudes.

9. The Rumpler C. 7 is equipped with a Maybach motor and is used by the Army Command for long distance reconnaissance flights.

10. The prisoner states that there are no pursuit flights in the Montmedy area, but pursuit planes are ordered from flights near Metz when needed on this front.

11. Lost or damaged machines are replaced by the Army Aircraft Park. Very often there are no machines of the type lost available and the flights have to take machines of the type on hand ; consequently many flights have two or more types of machines. Damaged planes and parts are sent to the Army Aircraft Park.

12. The prisoner states that new flying personnel is recruited from volunteers out of active regiments. These men are trained at flying schools in Germany, apparently divided into separate schools for observers and pilots. The prisoner was at the school in Grossenhain, Saxony, where he received instruction in flying, meteorology, compass reading and knowledge of the motor. He received but little instruction in the handling of machine guns and in bombing as these tasks are to be handled by the pilot only in emergencies. There are a great many students at the school in Saxony but only a few are able to pass the final examinations. The following planes were used in the school : Albatros, D. F. W. and Rumpler C. 1. with Benz, Mercedes and Maybach motors.

#### OPERATIONS

October 20, 1918.—Visibility very poor. Low clouds and rain.

One reconnaissance at low altitude by a Corps Observation plane.

No other missions undertaken on account of adverse weather conditions.

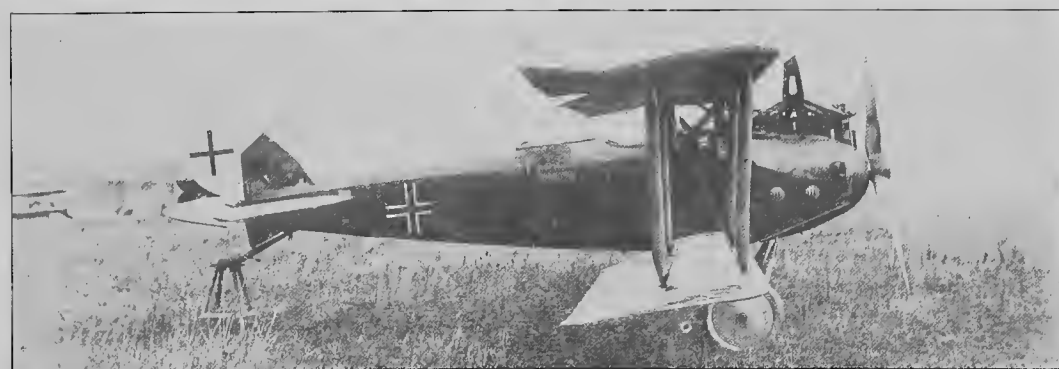
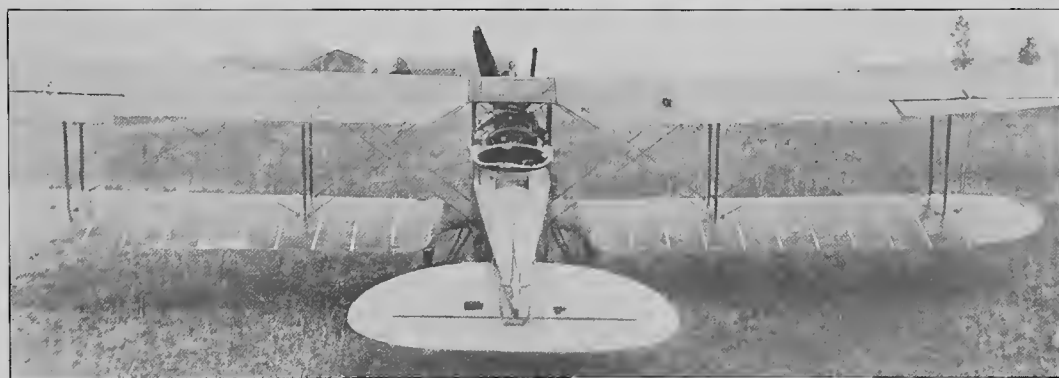
#### AMERICAN OFFICIAL COMMUNIQUE

OCTOBER 20, 1918, 9 P. M.

W. of the MEUSE our troops have continued their pressure on the enemy. E. of BANTHEVILLE in the course of local fighting in the Bois des Rappes they captured over 100 prisoners. On the entire front N. of VERDUN there has been heavy artillery and machine-gun fire. Severe counter-attacks have been thrown back with heavy losses to the enemy.

During the heavy fighting of the past week N. of VERDUN, we have drawn from other parts of the Western Front a constantly increasing number of German divisions, which are bitterly contesting every foot against our strong attack, in order to secure the retreat of the German Army, the position of which has been compromised by the attacks from the south east and west.





**L. V. G. 2 SEATER**  
**TYPE C 6**



# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### VIMY-NOYON RÉGION

27th Battle Flight.      Nouvelles (S. Of Mons) Oct. 13.      Last identified in Noyon-Argonne region,  
Prisoners statement, R. A. F.      May 30, 1918.

### EXTERIOR FRONTS.

28th Reconnaissance Flights.      Tiflis area. July 16. Document, R. A. F.      This flight had not been identified since,  
May, 1917, at which time it was at  
Dorubja.

## IDENTIFICATIONS

NIL

## AIRDROMES

NIL

## ENEMY AERIAL ACTIVITY

Oct. 21st, 1918. During the day enemy pursuit planes showed increased activity on the right of our sector. Also active between the Aire and the Meuse.

Enemy reconnaissance and adjustments over the right of our sector. At noon reconnaissance planes flew over Berupt.

Ten enemy balloons reported in ascension.

## PHOTOGRAPHS OF GERMAN PLANES

No. 4. of the Series  
(Photograph Attached).

L. V. G. 2-SEATER

Type C 6.

(See S. A. I. No. 61 of Oct. 1st, for reference to this plane.)

MAXIMUM SPREAD.—42 ft. 6 in.

OVERALL LENGTH.—24 ft. 6 in.

TOTAL MAIN PLANE AREA.—400 sq. Ft. (approximately).

WING SHAPE.—Upper plane is slightly trapezoidal, with trailing edge the longest. The tips of the lower plane are rounded as in the Hannover. There is a slight dihedral, a small positive stagger but no sweepback. The radiator is set into the central section of the top plane. The trailing edges of both upper and lower planes are cut away at the fuselage.

AILERONS.—On upper plane only and are not balanced.

RUDDER.—Above the fuselage, and balanced. It is of characteristic L. V. G. shape.

ELEVATOR.—Elevator and tail plane recall those of the Albatros.

FUSELAGE.—Of rectangular section with rounded top, and is covered with plywood. The main gasoline tank is situated under the pilot's seat and has a capacity of about fifty gallons.

ENGINE.—220 HP Benz equipped with Bosch double ignition system and a hand magneto for starting.

ARMAMENT.—Usual arrangement of two machine guns. The arc of fire of the observer's gun, has been increased by raising the turret slightly and lowering the top plane, thus permitting the gunner to fire over the top plane.

### WEIGHT.

Empty	.....	2094 lbs.
Total load	.....	947 "
Total	.....	3041 "

PERFORMANCE.—This machine is very popular with pilots on account of its reliability and good balance. It is said to be light on the controls and easy to handle. No figures are available as to its speed and climb but in all probability they are both inferior to those of the Rumpler with Maybach motor.

USES.—This is a 2-seater reconnaissance plane. It is principally used in making visual and photographic reconnaissances and to adjust artillery fire. In quiet sectors one plane may go out alone for reconnaissance work, but in more active areas 2 or more such planes work together, sometimes with Scout or Battle Plane protection. During a battle such planes may perform contact patrol duties in which case they carry a long streamer.

## OPERATIONS

Oct. 21, 1918.—Visibility fair.

Observation planes active during the day. Special reconnaissances over area between Grandpre, Buzancy, Stenay and Marville. A number of photographic reconnaissances undertaken. Propaganda dropped over enemy lines. Artillery adjustments performed on right of our sector.

# SUMMARY OF AIR INFORMATION

## CHANGES [IN LOCATION OF] UNITS

### ARGONNE-MOSELLE REGION.

219th Reconnaissance Flight.	Jametz, S. Oct. 18. Prisoner's statement, American source.....	Last identified in the Vimy-Noyon region, Sept. 7, 1918.
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## IDENTIFICATIONS

### ARGONNE-MOSELLE REGION.

33rd Battle Flight.....	Virton. Oct. 19. Prisoner's statement, American source.....	Last identified at Thonne-les-Pres (same region), Oct. 2, 1918.
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NOTE.—Identification of the 32nd Battle Flight at Virton in Summary of Air Information No. 82 (Oct. 22) was incorrect. Same should have been the 33rd. The 32nd Battle Flight is still unlocated, but believed to be in the Argonne-Moselle region.

2nd Pursuit Squadron.....	Marville. Oct. 18. Prisoner's statement, American Source.....	Last identified in the same region (air-drome unknown), Sept. 19, 1918.
(12th, 13th, 15th and 19th Flights.	Jametz S. Oct. 18. Prisoner's statement, American source.....	Last identified in Sivry-sur-Meuse area (same region), Sept. 8, 1918.
36th Reconnaissance Flight.	Thonne-les-Pres. Oct. 18. Prisoner's statement, American source.	Last identified at same place, Oct. 4, 1918.
44th Reconnaissance Flight.	Jametz N. Oct. 18. Prisoner's statement, American source.	
203rd Reconnaissance Flight.		

NOTE.—Prisoner recently stated this flight was at Montmedy but same prisoner now states it is at Jametz N., which is probably correct, as recent photograph shows this airdrome occupied.

## AIRDROMES

Nil

## ENEMY AERIAL ACTIVITY

Oct. 22nd, 1918.—During the day there was an increase in hostile pursuit aviation between the Meuse and Fresnes-en-Woevre. Late in the evening there was activity in the region west of the Meuse. West of La Chaussee, 5 planes reconnoitred the lines and east of La Chaussee, a number of patrols, 5 to 9, planes were reported.

Adjustments and reconnaissance planes were especially active in the sector east of the Meuse.

Bombing planes showed great activity during the night of 21st and 22nd dropping bombs in Montfaucon and in the vicinity of Nantillois, Cunel, Chatel, Coenay, Rarecourt, Baulny, Fleville and in the valley between the two last named towns. Ligny en Barrois was also bombed during the night.

During the day a group of 9 planes bombed Thiaucourt, Nammes, and the line in that vicinity, while Pont-à-Mousson was bombed several times during the night.

Ten balloons were reported in ascension.

## OPERATIONS

Oct. 22nd, 1918.—Visibility fair.

Our pursuit planes were active, dropping bombs on machine gun nests and machine gunning troops. Several hundred M. G. rounds were used at Preny and Pagny.

As a result of combats 14 enemy planes and 1 balloon are believed to have been shot down.

Our night flying machines made several reconnaissances over Bantheville, Dun-sur-Meuse, Mouzay, Stenay, Montmedy, Longuyon and Marville.

Visual reconnaissance and photographic missions were also carried out.

Bombs were dropped on La Chaussee and Rembercourt-sur-Mad.

## AMERICAN OFFICIAL COMMUNIQUE

(OCTOBER 22, 1918, 9 p. m.)

On the VERDUN front we have maintained and extended our gains of the preceding days. Violent counter-attacks on our new positions on HILL 297 and in the BOIS-DES-RAPPES brought the enemy only severe losses, our line remaining everywhere intact. Farther E. our troops have taken the BOIS-DE-FORET, capturing 75 prisoners. Artillery fire has increased in intensity and aviation has been more active on both sides of the MEUSE.

In the WOEVRE in the course of a successful raid our troops captured 26 prisoners.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### FLANDERS REGION.

14th Pursuit Flight ..... Wortegem..... October 14..... Prisoner's statement, R. A. F.  
Last identified in Lys-Vimy region, September 7, 1918.  
This flight moved from Wortegem to an airdrome farther in rear on October 15, 1918.  
13th Reconnaissance Flight ..... Wortegem..... October 17..... Machine shot down, R. A. F.  
Last identified in Lys-Vimy region, October 9, 1918

### EXTERIOR FRONTS.

214th Reconnaissance Flight. ... Russia. .... August 25..... Document, R. A. F.  
Last identified in Vosges-Switzerland region, February 17, 1918.

NOTE.—Identification in Vosges-Switzerland region was probably incorrect.

## IDENTIFICATIONS

### NOYON-ARGONNE REGION.

31st Battle Flight ..... Tagnon area ..... August 13..... Document, R. A. F.  
Last identified in the Laon area (same region), May 26, 1918.  
It is probable that this flight moved farther back in the same area at the time of the recent Allied advance.

## AIRDROMES

NIL.

## ENEMY AERIAL ACTIVITY

October 23, 1918.—A marked increase in aerial activity was reported on our front, notably on our left Pursuit aviation was especially active well within the German lines, where our bombing and reconnaissance planes were repeatedly attacked by formations of as many as 30 machines. Reconnaissance planes maintained a careful scrutiny of our rear areas from Clermont-en-Argonne to the Moselle, and an unusual number of deep reconnaissances were reported over our right. Numerous adjustments were made along the whole front. Bombs and propaganda were dropped on points near the front line on the right of our sector.

## FOKKER MONOPLANE

(FROM R. A. F. SUMMARY OF AIR INTELLIGENCE, OCTOBER 18, 1918).

A report shows that a monoplane designated type E.5 has been produced by the Fokker works, and trials have been carried out with this machine fitted with Oberursel (110 and 140 HP), 160 HP Goero, and 160 HP Siemens-Schuckert rotary engines.

The 160 HP Siemens-Schuckert appears to have given the best results.

The weight of the machine is stated to be :

Empty .....	792 lbs.
*Loaded .....	1,232 lbs.

NOTE.—The type E.5 had not previously been recorded, but it is assumed to refer to the Fokker monoplane reported at various times ; a sketch of this machine was published in SUMMARY OF AIR INTELLIGENCE, Serial No. 219, of September 9, 1918.

\*The weight of the Fokker Dr. 1 triplane (loaded) is 1,260 lbs.

## OPERATIONS

October 23, 1918.—Visibility : fair to good. Our pursuit aviation carried out protective patrols during the day and night. Corps and army observation squadrons carried out numerous adjustments and reconnaissances, while our bombing units dropped over five tons of explosives with good results on Sivry-les-Buzancy, Bois de la Folie, and Bois de Barricourt. In the course of the day's operations 16 planes and three balloons are reported to have been brought down by our aviators, and one plane by anti-aircraft fire.

## SUMMARY OF OFFICIAL COMMUNIQUE'S

OCTOBER 24, 1918.

### AMERICAN.

(October 24, 1918, 9 p. m.) On the VERDUN front there has been local fighting throughout the day. In a minor operation in the region of BANTHEVILLE our troops advanced their line 500 meters, reaching the ridge N. of the village and capturing 170 prisoners. As a result of yesterday's successful action E. of the MEUSE our troops are now established on the high ground in the Bois d'ETRAYES. Artillery fire has continued severe on the whole front, especially on the COTE de CHATIL-LOU and the Bois DES CAURES.

### FRENCH.

(October 24, 1918, morning.) On the OISE front our troops have crossed the canal E. of GRAND VERLY: in spite of hostile counter-attacks our elements held their ground on the E. bank.

Between the OISE and the SERRE the fighting was lively, also in the region of the railway N. of MESBRECOURT. We took prisoners.

We extended our gains appreciably during the night N. of NIZY-le-COMTE.

The artillery of both sides showed great activity on the plateaux E. of VOUIZIERS.

(October 24, 1918, evening.) On the OISE front our elements, after having crossed the canal on a line with LONG-CHAMP, advanced on the E. bank, taking about 30 prisoners. Between the OISE and the SERRE we launched an attack during the afternoon and in spite of German resistance our troops made a considerable advance to the S. of ORIGNY STE. BENOITE and to the N. of VILLERS-LE-SEC. Our right wing has reached the road from LA FERTE CHEVRESIS to FERRIERES Farm. The capture of several hundred prisoners is reported. There is nothing to report from the rest of the front excepting considerable artillery activity on the plateau E. of VOUIZERS.

AVIATION. On October 23 the weather improved and our aviators were able to carry out much work. Observation outfits in the course of numerous reconnaissances, of which some were carried to more than 70 kilometers beyond the enemy's lines, took many hundred photographs.

Two captive balloons were set on fire and 12 hostile machines were brought down or disabled. The greater part of these results were obtained in the region of the AINE, where the vigilance of our scouting machines was particularly active. During the night our bombing machines went up in spite of the most unfavorable atmospheric conditions and dropped 14,500 kg. of projectiles on the railway stations of MONTCORNET, MARLE, VERVINS, MASSIGNY and particularly on the station of PROVISY, where seven tons of explosives were dropped, causing several fires.

#### BRITISH.

(October 24, 1918, evening.) This morning our battle front was extended northward as far as the SCHELDT at THIAINT. Along the whole of the battle front between the SAMBRE Canal and the SCHELDT the enemy's resistance has been overcome and our advance has continued. Hard fighting has taken place at a number of points. On the right the 6th Division has fought its way forward to the eastern edge of the BOIS L'EVEQUE and has taken ORS. N. of this point our troops are approaching the western outskirts of the FORET DE MORMAL and have captured ROBERSART. In the right center of our attack our troops have continued their advance successfully to the N. of LEQUESNOY. We have taken the villages of POIX du NORD and LES TUILERIES and made progress beyond them toward ENGLEFONTAINE. The village of GHISSIGNIES was taken by the 37th Division after a sharp struggle, the enemy defending with determination the crossings of the ECAILLON in that vicinity. N. W. of GHISSIGNIES we have secured the river crossings at BEAUDIGNIES, which is in our hands; here also violent resistance was encountered and overcome by New Zealand troops, who in this locality have captured a number of batteries, including guns of heavy caliber. In the left center English divisions have captured RUESNES and are within a short distance of LEQUESNOY-VALENCIENNES railway, N. of this village. Heavy fighting has taken place on the high ground N. of BERMERAIN village, which we hold, and in the neighborhood of VANDEGIES-SUR-ECAILLON. At this latter village the enemy is still maintaining an obstinate resistance. On the left of our attack English and Scottish troops have crossings of the ECAILLON River between VERCHAIN and THIAINT and gained the high ground to the E. VERCHAIN and MONCHAUX were captured by the 4th Division after hard fighting. On their left the 51st Division, after clearing the enemy from the E. bank of the river, advanced to the western outskirts of MAING in the face of heavy machine-gun fire. In this sector the hostile resistance has been particularly stubborn. Severe casualties have been inflicted on the enemy in the course of these operations. Since yesterday morning we have captured over 7,000 prisoners and over 100 guns. Our troops have now reached the general line SAMBRE-ET-OISE Canal due E. of Le CATEAU—W. edge of the FORET de MORMAL—the neighborhood of LESQUESNOY—VANDEGIES-SUR-ECAILLON—SCHELDT Canal at MAING. Local fighting has taken place today in the VALENCIENNES-TOURNAY sector. Our troops have made progress and taken prisoners.

#### BELGIAN

(October 23, 1918, evening.) Artillery and machine-gun activity on the BELGIAN front was marked.

In the course of overcoming a strong point which was remaining on the W. bank of the Lys Canal we took about 50 prisoners.

AVIATION. About 20 airplanes were observed over the sector between the Dutch frontier and the BRUGES-GHENT Canal.

(October 24, 1918.) There is nothing of importance to report from the group of armies in FLANDERS.

The French Army has increased its advance to the E. of the Lys. It has reached the road from DEYNZE to COURTRAI between PETEGEM, which is not in our hands, and ASTENE and has progressed to the N. of VICHTE.



*Parachute successfully used by German Flyers*





SUMMARY OF AIR INFORMATION

CHANGES IN LOCATION OF UNITS

NIL.

IDENTIFICATIONS

ARGONNE-MOSELLE REGION.

5th Army Aircraft Park..... Habay-la-Neuve (N. W.  
of Arlon) ..... October 19 ..... Prisoner's statement,  
Last identified in same area July 19, 1918. American source.

AIRDROMES

NIL.

ENEMY AERIAL ACTIVITY

October 24, 1918.—In spite of the bad visibility, hostile aviation showed considerable activity on our left. Pursuit planes were frequently encountered on our extreme left and along the right bank of the Meuse.

Reconnaissance and adjustment planes were also active on our left, and one deep reconnaissance over Neuville, Aubreville, and Courcelles was reported. On our right, except for five attempted adjustments, there was no activity during the day.

During the night of October 23-24 enemy planes bombed machine guns and roads near our front line, and the towns of Nautillois, Montfaucon, Baulny, Exermont, Fleville, and Bar-le-Duc.

Pont-à-Mousson was bombed four times during the same night.

JUNKER TWO-SEATER TYPE J.1.

A machine of this type was salvaged during the recent operations. It is constructed throughout of metal; all the main spars, longerons, and internal bracing are of aluminum alloy tubing, and the covering of the wing is of corrugated sheet aluminum.

The engine, which is a 220 HP Benz, and forepart of the fuselage to the observer's cockpit, are completely protected by 5 mm. armor plating.

Machine No. 181. Date of construction, August 5, 1918.

WEIGHT (according to figures on the fuselage) :

Weight empty .....	3,724 lbs.
Useful weight.....	845 lbs.
Total weight .....	4,569 lbs.

Weight of one lower plane is 70 lbs. (in R. E. 8 is 45 lbs.). (Total weight of R. E. 8 is 2,869 lbs.)

The machine is camouflaged in patches of green and purple.

The petrol tank, which forms the pilot's seat, has a capacity of 77 gallons, and the oil tank, which is just in front of the instrument board, has a capacity of 10 gallons.

ARMAMENT.—No guns were salvaged with this machine.

DIMENSIONS.

Total span of top plane .....	51 ft. 0 in.
Total span of bottom plane .....	35 ft. 7 in.
Span of ailerons (each) .....	18 ft. 2 in.
Chord of ailerons.....	1 ft. 8½ in.

HALBERSTADT TWO-SEATER TYPE C 5

The existence of a Halberstadt two-seater reconnaissance plane was recently reported by a prisoner (see SUMMARY OF AIR INFORMATION, No. 74, October 14, 1918). A plane of this type has been shot down by the French and the number found to be C5 instead of C L 5 as previously reported. In appearance this plane is somewhat similar to the L. V. G., C6.

PARACHUTES ON GERMAN PLANES

(Photographs Attached).

Recently there have been reported numerous cases of German planes being shot down in flames, from which the flyers have descended safely by means of parachutes. Captured aviators have declared that all German planes are being equipped with parachutes as rapidly as possible, both for pilot and observer, and that the flying personnel has absolute confidence in them.

Attached are photographs of a captured airplane parachute and reproductions of German photographs showing the method of attachment. The cord shown leading to the plane is attached to the top of the parachute and, passing through an opening in the bag, is fastened to the fuselage. When the pilot jumps, the tension on this cord opens the bag and pulls out the parachute, which is fastened by the usual system of rigging lines to the pilot's belt. When these lines tighten, the momentum of the aviator's descent breaks the fastening by which the apparatus is attached to the fuselage, permitting the parachute to open.

## OPERATIONS

October 24, 1918.—During the day heavy fog and a ground haze prevented activity on the part of our air forces. However, several successful infantry contact patrols were executed in the course of the day.

During the night of October 23-24 the regions of Grandpre, Buzancy, Oches, Stenay, Dun-sur-Meuse, and Briulles were reconnoitered, while our pursuit patrols engaged in five combats with hostile bombing planes without result.

## SUMMARY OF OFFICIAL COMMUNIQUEES

OCTOBER 25, 1918.

### AMERICAN.

(October 25, 1918, 9 p. m.) On the VERDUN front the battle has continued with great violence E. of the MEUSE. Late yesterday our troops enlarged their important gains S. of the CONSENVOYE-DAMVILLERS road and occupied completely the BOIS D'ORMONT. Today the enemy counter-attacked repeatedly and with strong forces on the front from the BOIS D'ORMONT to the BOIS D'ETRAYES. Although supported by violent artillery and machine-gun fire, his attacks were repulsed with extremely heavy losses. Only in the BOIS BELLEU did he succeed in slightly pushing back our line. At this point, after three assaults had failed before the stubborn resistance of our troops, the fourth attack forced us to withdraw from the eastern part of the wood. Hostile forces which attempted to penetrate our positions N. W. of the BOIS BELLEU were driven back after a severe struggle lasting throughout the day. W. of the MEUSE our troops have advanced in the face of determined resistance on the slopes northwest of GRAND PRÉ and have entered the southern portion of the BOIS DE BOURGOGNE.

### FRENCH.

(October 25, 1918, morning.) On the OISE we repulsed two German attempts during the night against our units. E. of the canal between LONGCHAMPS and NOYALES.

On the front of the SERRE and the SOUCHE artillery and machine guns were active. This morning our troops again began to press the enemy. E. of SISSONNE the Germans launched two unsuccessful raids against LA SELVE and NIZY-LE-COMTE.

An operation, well carried out, E. of RETHEL enabled us to occupy the village of AMBLY-FLEURY between the canal and the AISNE, in spite of obstinate defense by the Germans. We took about 100 prisoners, including several officers, and captured many machine guns. Our patrols N. of OLIZY brought back 20 prisoners.

(October 25, 1918, evening.) Between the OISE and the SERRE our attacks have been carried out successfully. Our troops have made further advances to the N. of VILLERS-LE-SEC and have taken the FERRIERE Farm. Between VILLERS-LE-SEC and the FERRIERE Farm we have taken strongly organized centers of resistance in spite of vigorous enemy counter-attacks. Eight hundred prisoners have been reported.

On the SERRE front we have been able to cross the river between CRECY and MORTIERS and to establish ourselves on the S. bank for a distance of more than one kilometer. E. of the SOUCHE fierce fighting has brought us notable gains. We have advanced our line to the vicinity of CAUMONT Farm, E. of VESLES-ET-CAUMONT and PIERREPONT, and these two villages are under our control. The number of prisoners already counted is more than 250. Between SISSONNE and CHATEAU PORCIEN the fighting has had all day the character of extreme violence. This morning after a heavy artillery preparation, our troops supported by tanks attacked the strong positions which the enemy opposes to us in this region.

On the left we have been able to progress in the woods to the neighborhood of the road from SISSONNE to LA SELVE. Toward the E. we have taken ST. QUENTIN-LE-PETIT by assault and have reached the road which connects this village with BANOGNE-RECOURVANCE. The southern outskirts of the latter town and of the hamlet of RECOURVANCE are in our possession.

On our right we have penetrated the enemy positions along the CONDE-LES-HERPY road and at HILL 145. We have taken HERPY Mill. In all this region the resistance of the enemy has been particularly stubborn. We have made more than 2,000 prisoners, and taken nine cannon and a number of machine guns. E. of RETHEL we have completed our success of the morning in the neighborhood of AMBLY-FLEURY. One hundred and five prisoners have been counted, of whom six are officers, one of them a major.

### BRITISH.

(October 25, 1918, morning.) Yesterday afternoon our troops attacked and took VENEGIES-SUR-ECAILLON and made progress on the high ground to the E. of the village. A German counter-attack was successfully repulsed. In this sector fighting was resumed early this morning.

At the close of yesterday's fighting the enemy's resistance at MAING was overcome and the village remained in our hands.

On the remainder of the battle front our advanced troops pushed forward at several points.

### ITALIAN.

(October 25, 1918, 4.05 p. m.) Heavy fighting occurred yesterday morning in the MONT GRAPPA area. In spite of the torrential rains our detachments courageously attacked strong hostile positions at several points, succeeding in capturing and maintaining possession of important points of support in the western and northern regions of the massif. They also succeeded in establishing themselves on the N. bank of the ORNIC, in the ALANO Basin. The enemy is offering determined resistance and is suffering heavy losses.

At GRAVE di PAPADOPOLI, on the PIAVE, several islands were occupied and the garrisons captured.

In the POSINA-ASTICO sector and in the VAL D'ASSA hostile advanced posts were destroyed. On the ASIAGO Plateau our own and Allied patrols carried out some small successful raids.

The total number of prisoners captured from midnight on the 23d instant to midnight on the 24th instant is 84 officers and 2,791 men.

### BELGIAN.

(October 26, 1918, 12.33 a. m.) No activity.

### GERMAN.

(October 25, 1918, 12.40 p. m.) WESTERN FRONT. Army Group of Crown Prince Rupprecht. In FLANDERS the fighting in the low country along the LYS continues. The enemy, who yesterday had penetrated the southwestern part of DEYNZE, was thrown out in counter-attack. S. W. of DEYNZE we captured parts of the bridgehead which the French had established across the LYS. A hostile attack of considerable strength E. of VIVE SAINT ELOI and local attacks between the LYS and the SCHELDT and along the SCHELDT were repulsed. The enemy's demolition of villages along the SCHELDT continues. The central parts of the town of TOURNAI were also under British fire. The emigration of the population from these regions eastward is increasing.

E. of SOLESMES and Le CATEAU the British continued their heavy attacks and extended them northward as far as the SCHELDT. S. of the SCHELDT, they broke down in front of our lines on heights E. of the ECAILLON. In the course of the assaults in the direction of Le QUESNOY the enemy penetrated as far as the railway N. W. and W. of LE QUESNOY.

Hostile attempts to advance beyond LE QUESNOY in a northerly direction were broken up by our troops launched from SEPMERIES and VILLERS POLI. The enemy, attacking on a wide front the forest of MORVAL, succeeded in gaining a footing in POIX du NORD and in FONTAINE AU BOIS. Elsewhere he was checked after violent fighting W. of the ENGBFONTAINE-LANDRECIERS road. In the course of yesterday's attacks the enemy succeeded in gaining ground to a

depth of 800 to 1,000 meters. He again failed in obtaining any important results yesterday in spite of the use of extraordinary forces.

Army Group of the German Crown Prince. Artillery fighting was intermittent along the OISE and the SERRE and W. of the AISNE. Local hostile attacks broke down along the OISE. Between the OISE and the SERRE heavy French attacks were repulsed. Wherever the enemy penetrated our lines he was thrown out in counter-attack. In the sectors on both sides of VOIZIERS combat activity diminished. The hill E. of CHESTRES was held by Bavarian and Wurtemberg troops against renewed and violent attacks by the enemy.

Army Group of von Gallwitz. Local attacks by American troops on both banks of the MEUSE were repulsed

SOUTHEASTERN FRONT. The enemy made attacks on both sides of the MORAVA. W. of the river they forced us back slightly in the mountains S. of KRAGUEVAC. They were repulsed E. of the river in the neighborhood of PARACIN.

(October 25, 1918, 7.50 p. m.) In FLANDERS, between the LYS and the SCHELDT, we repulsed hostile attacks. No combats of importance occurred today between the SCHELDT and the OISE. French attacks on the front from the OISE to the AISNE, the main attack being between the OISE and the SERRE and W. of the AISNE, were unsuccessful. Local engagements occurred E. of the AISNE and on both sides of the MEUSE.

#### FRENCH.

(October 24, 1918.) ARMY OF THE ORIENT. On the DANUBE in the region of LOMPALANKA there has been an artillery duel. The fire of our batteries damaged an enemy monitor. In the course of raids on the N. bank of the DANUBE, French patrols have caused losses to German detachments, capturing prisoners. In SERBIA on the front PARANCIN-KARALIEVO the Allied forces continued the pursuit of the enemy, who is retreating toward the N. Two hundred additional prisoners have been made.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### ARGONNE-MOSELLE REGION.

232d Reconnaissance Flight..... Ozerailles ..... October 25 ..... Prisoner's statement,  
American source.  
Last identified in Vimy-Noyon region, September 15, 1918.

## IDENTIFICATIONS

### ARGONNE-MOSELLE REGION.

31st Reconnaissance Flight ..... Ozerailles..... October 25 ..... Prisoner's statement,  
American source.

Last identified at Doncourt (same region), September 24, 1918.

44th Reconnaissance Flight ..... Unlocated in sector ... October 18..... Prisoner's statement,  
American source.

Last identified at Thonne-les-Pres, October 4, 1918.

NOTE.—It is believed that this flight has moved farther back in same region.

46th Reconnaissance Flight ..... Briey ..... October 25 ..... Prisoner's statement,  
American source.

Last identified at same place, October 5, 1918.

279th Reconnaissance Flight ..... Ozerailles ..... October 25 ..... Prisoner's statement,  
American source.

Last identified with Army Detachment "C" (believed to be at Porcher), September 26, 1918.

## AIRDROMES

### ARGONNE-MOSELLE REGION.

1. Changes in existing airdromes.	Changes in Accommodation.			Present Accommodation.		
	Hangars.	Sheds.	Capacity.	Hangars.	Sheds.	Capacity.
80. Mouzay .....	+3	..	+5	3	4	20
Increase since September 4, 1918.	Now occupied.	United States photo,	October 10, 1918.			

### MOSELLE-VOSGES REGION.

1. Changes in existing airdromes.  
104. Nitting..... +1 .. +2 6 .. 12  
Increase since September 2, 1918. British photo, September 16, 1918.

2. Photographs of the following airdromes show no change.

107. Bitche..... .. 4 1 20  
British photo, October 23, 1918.  
7. Frescaty ..... .. 21 5 148  
British photo, October 23, 1918.

3. Reported airdromes requiring confirmation by photograph.

2134. Mettenheim. Reported October 25, 1918.

This airdrome was reported not to exist in SUMMARY OF AIR INFORMATION, No. 80 (October, 20), but has been reported again.

## GERMAN AIRDROME ACCOMMODATIONS FROM ARGONNE TO THE SWISS BORDER, OCTOBER 19, 1918 AND OCTOBER 26, 1918

Region.	Airdromes.		Hangars.		Sheds.		Capacity.	
	Oct. 19.	Oct. 26.	Oct. 19.	Oct. 26.	Oct. 19.	Oct. 26.	Oct. 19.	Oct. 26.
Argonne-Moselle .....	42	42	280	283	72	72	994	999
Moselle-Vosges .....	39	39	263	264	79	79	1,186	1,188
Vosges-Switzerland.....	33	33	272	272	103	103	1,371	1,371
Total .....	114	114	815	819	254	254	3,551	3,558

## ENEMY AIR ORDER OF BATTLE, ARGONNE TO SWISS BORDER, OCTOBER 26, 1918

### ARGONNE-MOSELLE REGION

#### Pursuit Flights:

12th—Marville (Airdrome No. 30).  
13th—Marville (Airdrome No. 30).  
15th—Marville (Airdrome No. 30).  
18th—Bruville area (probably Conflans Airdrome  
No. 72).  
19th—Marville (Airdrome No. 30).  
64th—Mars-la-Tour (before the advance).  
65th—Mars-la-Tour (before the advance).  
67th—Marville (Airdrome No. 30).

#### Bombing Flights:

28th (?)—Cosnes (Airdrome No. 19).  
29th (?)—Cosnes (Airdrome No. 19).  
30th (?)—Cosnes (Airdrome No. 19).

#### Battle Flights:

2d—Autrecourt (Airdrome No. 103).  
5th—Virton (Airdrome No. 67).  
20th—Virton (Airdrome No. 67).  
21st—Virton (Airdrome No. 67).  
32d—Unlocated.  
33d—Virton (Airdrome No. 67).  
37th—Thonne-les-Pres (Airdrome No. 54).  
45th—Unlocated.

#### Reconnaissance Flights:

29th—West of Briey (probably Briey Airdrome  
No. 16).  
31st—Ozerailles (Airdrome No. 32).  
36th—Jametz S. (Airdrome No. 76 S.).  
37th—Doncourt (Airdrome No. 72).  
41th—Unlocated.  
46th—Briey (Airdrome No. 58).  
47th—Unlocated.  
203d—Jametz N. (Airdrome No. 76N.).  
206th—Unlocated.  
215th—Probably at Buzancy (Airdrome No. 400).  
219th—Jametz S. (Airdrome No. 76 S.).  
232d—Ozerailles (Airdrome No. 32).  
246th—Briey (Airdrome No. 58).  
274th—Stenay (Airdrome No. 57).  
279th—Ozerailles (Airdrome No. 32).  
280th—Thonne-les-Pres (Airdrome No. 54).  
296th—Conflans area.  
298th—Buxeres (before the advance.)

## MOSELLE-VOSGES REGION.

*Pursuit Flights:*

28th—Metz area.  
78th—Buhl (Airdrome No. 6).  
80th—Marimont (Airdrome No. 47).  
84th—Frescaty (Airdrome No. 7).

*Reconnaissance Flights:*

12th—Many (Airdrome No. 11).  
67th—Lorquin (Airdrome No. 12).  
100th—Morhange (Airdrome No. 8).  
199th—Bensdorf (Airdrome No. 45).  
218th—Unlocated.  
242d—Frescaty (Airdrome No. 7).  
257th—Morhange (Airdrome No. 8).  
275th—Metz area.  
281st—Lorquin (Airdrome No. 12).

*Bombing Flights:*

25th—Boulay (Airdrome No. 61).  
26th—Boulay (Airdrome No. 61).  
27th—Boulay (Airdrome No. 61).

*Battle Flights:*

None.

*Home Defence Flights:*

1st—Bitche (Airdrome No. 107).  
2d—Folpersweiler (Airdrome No. 60).  
3d—Morhange (Airdrome No. 8).  
8th—Bitche (Airdrome No. 107).

## VOSGES-SWITZERLAND REGION.

*Pursuit Flights:*

69th—Habsheim (Airdrome No. 26).  
70th—Stotzheim (Airdrome No. 89).  
71st—Habsheim (Airdrome No. 26).  
75th—Habsheim (Airdrome No. 26).  
76th—Habsheim (Airdrome No. 26).

*Home Defense Flights:*

4-B—Fribourg (Airdrome No. 2).  
5th—Neuf-Brisach (Airdrome No. 23).  
6th—Neuf-Brisach (Airdrome No. 23).  
14th—Lahr (Airdrome No. 41).  
(?) Karlsruhe (Airdrome No. 65).

*Reconnaissance Flights:*

4th—Hagenau (Airdrome No. 55).  
10th—Schlestadt (Airdrome No. 4).  
43d—Schlestadt (Airdrome No. 4).  
243d—Colmar (Airdrome No. 28).  
267th—Habsheim (Airdrome No. 26).  
282d—Sierentz (Airdrome No. 27).  
289th—Habsheim (Airdrome No. 26).

*Mosaic Sections:*

4th—Altdorf (Airdrome No. 88).

*Bombing Flights:*

None.

*Battle Flights:*

None.

## DISTRIBUTION OF IDENTIFIED GERMAN AIR UNITS FOR WEEKS ENDING OCTOBER 19, AND OCTOBER 26

Region.	Pursuit.		Reconnaissance.		Battle.		Bombing.	
	Oct. 19.	Oct. 26.	Oct. 19.	Oct. 26.	Oct. 19.	Oct. 26.	Oct. 19.	Oct. 26.
Flanders .....	7	8	7	7	2	2	6	6
Lys-Vimy .....	8	7	21	19	3	3	3	3
Vimy-Noyon .....	27	27	39	38	11	12	9	9
Noyon-Argonne .....	22	22	45	43	17	16	6	6
Argonne-Moselle .....	8	8	15	18	8	8	3	3
Moselle-Vosges .....	4	4	9	9	..	..	3	3
Vosges-Switzerland .....	5	5	8	7	..	..	..	..
Exterior Fronts .....	2	2	18	20	..	..	..	..
Unlocated .....	2	2	1	1	1	1	..	..
Total .....	85	85	163	164	42	42	30	30

Total identified flights (all classes) on all fronts, October 26—348.

Total estimated machines belonging to such flights—3,006.

## ENEMY AERIAL ACTIVITY

October 25, 1918.—Visibility: Bad. Except for ten planes reported just west of the Meuse during the morning, hostile activity was practically nil.

## OPERATIONS

October 25, 1918.—Adverse weather conditions prevented the execution of night missions and made observation during the day difficult. Our infantry contact planes were able to carry out a few missions, locating a number of enemy batteries and maintaining liaison with our troops. Our pursuit planes made several patrols over the enemy's lines, but no enemy aircraft were encountered.

## SUMMARY OF OFFICIAL COMMUNIQUE

OCTOBER 27 1918.

## AMERICAN.

(October 26, 1918, morning.) On the VERDUN front yesterday evening the enemy extended to the W. side of the MEUSE his efforts to wrest from our troops the gains of the preceding days. In the region of BANTHEVILLE, after artillery preparation lasting half an hour, he attacked our positions between the Bois des RAPPES and the Bois de BANTHEVILLE. After sharp fighting he was repulsed with heavy losses, our line remaining everywhere unchanged. N. of the AIRE our troops have organized the ground won in yesterday's local attack and are now established in positions in the southern portion of the Bois de BOURGOGNE. On both banks of the MEUSE artillery fire continued heavy throughout the night.

The battle being fought by our First Army N. of VERDUN, which today enters upon its second month, is continuing with incessant severity, frequently rising to a pitch of extreme violence. On the entire front of 25 miles the enemy is opposing to our successful attack a determined resistance, made necessary by the great importance to him of this sector, and made possible only by the constant reinforcement of his hard-pressed divisions. Besides having inflicted on the enemy severe losses in killed and wounded, we have captured on this front since September 26 more than 20,000 prisoners; and in the course of our advance, over 150 guns, nearly 1,000 trench mortars, and several thousand machine guns have fallen into our hands.

(October 26, 1918, evening.) N. of VERDUN our troops have made further progress in the Bois de BOURGOGNE, reaching the hamlet of FUMAY. Artillery fire has continued heavy, particularly in the region of BANTHEVILLE and E. of the MEUSE.

## FRENCH.

(October 26, 1918, morning.) During the night great artillery activity occurred between the OISE and the SERRE. We maintained contact with the enemy on the entire front reached yesterday.

On the S. bank of the SERRE we attacked the village of MORTIERS, which fell into our hands after hard fighting, in the course of which we took 167 prisoners, including two officers.

E. of the SOUCHE the night was marked by strong reactions of the enemy's infantry. A very lively fight took place on the outskirts of PETIT CAUMONT.

The German counter-attacks were checked and we held our positions E. of the river. The battle between SISSONNE and CHATEAU PORCIEN continued yesterday evening. Our troops, breaking the hostile resistance, have carried the strong positions, constructed in 1917 and constantly re-enforced by them, between BANOGNE-RECOUVRANCE and HERPY MILL, on a front of 7 kilometers and to a depth which reached 3 kilometers in some places.

We have advanced our lines to the RECOUVRANCE—CONDE-les-HERPY road. Farther to the right we have taken HERPY MILL and several centers of resistance. We took numerous prisoners and captured considerable materiel.

The situation is unchanged on the remainder of the front.

#### BRITISH.

(October 25, 1918, evening.) This morning our troops continued their advance on the battle front S. of the SCHELDT. We took SEPMERIES and QUERENAING and reached the Le QUESNOY-VALENCIENNES railroad, from N. E. of Le QUESNOY to E. of MAING. During the two days of this battle, October 23 and 24, the 1st, 3d and 4th British Armies took 9,000 prisoners and 150 guns on the SOMBRE-SCHELDT front.

N. of VALENCIENNES we drove the rear-guards of the enemy from the villages of BRUILLE and BURIDON.

(October 26, 1918, morning.) Early this morning we carried out a successful minor operation on the outskirts of the forest of MORMAL. We captured the hill of MONT CARMEL and the village of ENGLEFONTAINE and took a number of prisoners. Farther N. our patrols made progress at some points N. of the Le QUESNOY-VALENCIENNES railroad.

Last night the enemy made a violent counter-attack on our positions on the railroad E. of MAING. The 51st Division repulsed the attack with the bayonet and inflicted heavy losses on the Germans. Our front was advanced. Between VALENCIENNES and TOURNAI we made progress and took the villages of ODOMEZ and MAULDE.

#### BELGIAN.

(October 25, 1918.) The operations of the army group in FLANDERS have continued successfully. On the front of the Belgian Army the enemy showed some artillery and machine-gun activity. This morning the French right and the British left carried out a partial attack between the LYS and the SCHELDT, E. of COURTRAI. In spite of stubborn enemy resistance, the French troops took the plateau of ZULTE and are on the western outskirts of ZULTE. After taking the farm of BLAUNPOORT, they advanced their front to the WAERGHEMANSEGHEM road. The British troops took INGVOGHEM and OOTEGHEM and are continuing their progress toward the SCHELDT.

#### GERMAN.

(October 26, 1918, 2.07 p. m.) WESTERN FRONT. The distinguished bravery of our troops enabled us to carry out very heavy fighting at many points on the front with success.

Army Group of Crown Prince Rupprecht. After violent artillery fire the enemy launched heavy attacks in the low ground along the LYS, S. W. of DEYNZE, and between the LYS and the SCHELDT. From the northern wing of the attack as far as the railway from COURTRAI to OUDENARDE we repulsed them in front of our lines. In the course of this fighting the 6th Guard Infantry Regiment, commanded by Major Nadolny, along the LYS, the 40th Saxon Infantry Division, at the SPITAALS BOSSCHEN, and the 118th Hessian Infantry Regiment, commanded by Major von Weyrauch, along the Scheldt, fought with particular success. N. of the SCHELDT we checked the enemy very soon after his slight initial gain of ground. The new line between INGVOGHEM and AVELGHEM was maintained against repeated assaults during the afternoon. On the battle-field the enemy's artillery fired all day on the villages in rear of the front, which until now had remained untouched, whereby they were in great part destroyed. The Belgian population has suffered heavy losses in killed and wounded. Between the SCHELDT and the OISE the BRITISH yesterday limited their activity to violent local attacks. S. of FAMARS we threw the enemy back to his starting positions by means of a flanking counter-attack. The attacks S. W. of Le QUESNOY and N. W. of LANDRECIES broke down before reaching our lines.

Army Group of the German Crown Prince. Between the OISE and the AISNE the French opened a general offensive on a front of more than 60 kilometers. Their main effort was directed against our lines between the OISE and the SERRE, as well as between SISSONNE and the AISNE. They attempted to capture the SERRE and SOUCHE sector by making use of the natural advantages of the terrain. The attacks launched early in the morning between the OISE and the SERRE broke down in front of our lines. During the afternoon the enemy gained a footing in VILLERS-le-SEC and on the height E. of the village. On the rest of the front he was repulsed during the afternoon also and suffered heavy losses under our fire. In the SERRE and SOUCHE sector the enemy succeeded in reaching our lines only near MONTIERS and FROIDMONT, and near VESLES and PIERREPONT. The troops of General Freiherr von Luettwitz retook their old position in a general counterattack between VESLES and PIERREPONT. On the rest of the front our fire prevented the enemy from passing beyond these sectors. The enemy's attacks W. of the AISNE, which were accompanied by large tank squadrons, broke down E. of SISSONNE and on both sides of La SELVE, in spite of being repeated seven times. The enemy launched particularly heavy forces between NIZY-le-COMTE and the AISNE. In front of the 4th Guard Infantry Division fighting W. of BANOGNE there are 23 destroyed tanks. Lance Corporal Menschkiel, of the 9th Battery, 6th Guard Field Artillery Regiment, destroyed eight, and Corporal Brockman, of the same battery, ten of these tanks. On the high ground W. of the AISNE the enemy penetrated our position after fighting hard for its possession during the day. In spite of throwing large forces into the struggle at this point, the enemy was unable to obtain further advantages from his penetration at the SACHSENWALD, N. W. of HERPY. Only parts of our foremost lines remained in his hands. Local combats occurred in the low ground along the AISNE, S. W. of AMAGNE. The enemy, who succeeded in temporarily advancing near AMBLV to the northern bank of the AISNE, was thrown back across the river by our counter-attack. E. of the AISNE the artillery fighting was only temporarily active. Local hostile attacks forced our outposts back to the northern edge of the hill N. of GRANDPRE. At other points they were repulsed.

Army Group of von Gallwitz. Combat activity on both sides of the MEUSE was restricted to harassing fire and minor infantry fighting. An American group which had remained on the eastern bank of the river during the recent fighting was cleared out by Saxon companies.

Army Group of Duke Albrecht. We captured prisoners in the course of a successful operation S. of the SEILLE.

# SUMMARY OF AIR INFORMATION

## CHANGE IN LOCATION OF UNITS

### ARGONNE-MOSELLE REGION.

1st Pursuit Squadron (Richthofen) Joppecourt ..... October 10..... Report, R. A. F.  
(4th, 6th, 10th, and 11th Flights).  
Reported in Vimy-Noyon region, October 2, 1918.

NOTE.—Identification of this squadron in Vimy-Noyon region on October 2d was probably incorrect, as this squadron was reported in the Conflans area on September 12 and several prisoners have stated that it has been in this region since about September 1.

### MOSELLE-VOSGES REGION.

63d Pursuit Flight ..... Metz area ..... October 5..... Prisoner's statement,  
R. A. F.  
Last identified in Noyon-Argonne region, August 9, 1918.

## IDENTIFICATIONS

### ARGONNE-MOSELLE REGION.

280th Reconnaissance Flight .... Longuyon ..... October 19..... Document, French source.  
Last identified at Montmedy (same region), September 2, 1918.

### MOSELLE-VOSGES REGION.

281st Reconnaissance Flight ..... Sarrebourg area ..... October 4..... Prisoner's statement,  
R. A. F.  
Last identified at Lorquin (same area), September 2, 1918.

### VOSGES-SWITZERLAND REGION.

243d Reconnaissance Flight..... Colmar area..... September 18 ..... Document, French source.  
Last identified at Colmar, September 2, 1918.

## AIRDROMES

Nil.

## ENEMY AERIAL ACTIVITY

October 26, 1918.—Visibility: bad to impossible. Considering the poor visibility, hostile planes were active, notably between Grandpre and the Meuse, during the afternoon. There was also some activity of pursuit aviation between La Chaussee and the Moselle. The greatest activity of the day was shown by hostile adjustment planes, 18 attempted adjustments being reported on our front. Reconnaissance activity was comparatively slight.

Miscellaneous—One plane was reported dropping propaganda east of La Chaussee.

## CAPTURE OF NEW TYPE OF ENEMY PLANE AND INTERROGATION OF PRISONERS

The capture of two German aviators belonging to Reconnaissance Flight 279, on October 25, flying a new type of Halberstadt machine, is of special interest. Following are the salient facts brought out by the interrogation of the prisoners, together with a description of the airplane.

### CIRCUMSTANCES OF CAPTURE :

The prisoners, flying a Halberstadt C5 machine, had for their mission to drop propaganda within the American lines. They claim that they lost their way in the fog, and, perceiving Italian soldiers whom they mistook for Austrians, decided to land and orient themselves. They landed within 15 kilometers of Toul, and although the machine was armed with both Spandau and Parabellum machine guns, they surrendered to five unarmed Americans.

### IDENTIFICATIONS :

The prisoners identify the location of their flight, Reconnaissance Flight 279 (Fliegerabteilung A) at Les Baroches, and state that Reconnaissance Flight 232 is at the same place. They further identify Reconnaissance Flight 277 at Marville, but this should be taken subject to further confirmation. Other identifications given by the prisoners and corroborated by documents found upon them are :

31st Reconnaissance Flight at Ozerailles.

5th, 20th and 21st Battle Squadrons at Anous.

NOTE.—These were identified here September 16 and at Virton October 19, 1918. This is probably a confirmation of old identification.

Reconnaissance Flight A. O. K. 46 at Briey.

Aviation Commander (Kofl) Army Detachment "C" at Briey. Captain Rutz in command August 25th.

The prisoners identify the following Army Aviation Parks (Flugpark)

Park 4..... GHENT (No longer here. Reported at Antwerp).

Park 6..... Tournai.

Park 2..... VALENCIENNES. (It is improbable that this park is still located here, because of the proximity to the present line. Reported in Maubeuge area.)

Park 7..... CHIMAY. (No longer here. Now at La Ville au Bois.)

Park 1 ..... RETHEL. (It is improbable that this park is still located here, because of the proximity to the present line. Location unknown.)

Park 3..... MOUZON.  
 Park 5..... MONTMEDY. (No longer here. Now at Hobay-la Neuve.  
 Park "C"..... FRESCATY-METZ.  
 Park 19..... SARREGUEMINES. (D. F. P. 123.)  
 Park "A"..... STRASBOURG.  
 Park "B"..... NEUF-BRISACH (?) D. F. P. 2265.

## MOTOR TRANSPORTATION :

The prisoners state that Reconnaissance Flight 279 is equipped with five motor trucks, an automobile and five motorcycles. One of the trucks is used for tires and other airplane accessories (Flugzeugkraftwagen) ; one is for use of the wireless (this truck is covered and is likewise equipped with seats for passengers) ; a third truck is fitted up as an ambulance. The two remaining trucks are for general purposes. The motor car is used solely by the flight commander. The prisoners state that with this equipment the flight is entirely mobile. In this connection they state further that within the past two weeks considerable matériel, including a number of bombs, was shipped back to Germany. They say this was done in order to make the removal of the entire flight, upon order, a matter of short time.

The prisoners were unable to state whether other flights are similarly equipped, but remarked that the flight commander seemed to be able to obtain from the Army park whatever transportation he desired.

## MATÉRIEL AND PERSONNEL :

Both prisoners state that there appears to be no shortage of airplanes in Germany, but that great difficulty is experienced in obtaining proficient pilots. They state further that many of the mechanics are being drafted into the infantry to fill gaps, and that care of motors and other equipment is suffering accordingly. There is a great lack of lubricating oil ; castor oil is practically impossible to obtain, and recourse is being had to a black bone-oil which is highly unsatisfactory.

## JUNKER J 1 :

According to the prisoners' statement this type of airplane is unpopular with pilots. They call it "Moebel-wagon" (*i. e.*, furniture van) too heavy and unwieldy to be of use.

## HALBERSTADT RECONNAISSANCE PLANE

The following description relates to a German plane which landed intact in our lines on October 25th. This plane is of very recent construction and is typical of the latest German design :

Military number : Halb. C. V. (D. F. W.) 4185/18.

Date stamped on lower left plane : 12/8/18.

## WEIGHTS (according to data printed on the fuselage) :

Empty .....	2,063 lbs.
Load .....	946 lbs.
Total .....	3,009 lbs.

## MEASUREMENTS :

Maximum span of upper plane (excluding ailerons).....	41 ft.	8 in.
Maximum span of lower plane.....	42 ft.	1 in.
Overall length.....	23 ft.	
Chord of upper plane.....	5 ft.	4 in.
Chord of lower plane.....	5 ft.	4 in.
Gap (uniform from fuselage to wing tips).....	5 ft.	1 in.
Stagger (approximate).....		14 in.
Total length of aileron (including balancer).....		81 in.
Extension of balancer.....		20 in.
Chord of aileron.....		17 in.
Chord of balancer.....		34 in.

## CHARACTERISTIC SHAPES :

There are many points of similarity in construction and design between the C5 and the CL Halberstadt, but in general appearance they are totally different. The fuselage has been strengthened, deepened and made wider to accommodate a heavier engine. This change has given to the nose a distinctly blunt appearance, and the whole fuselage appears thick and stocky. As in the previous types the fuselage is constructed of ply-wood, and the pilot and observer are seated close together.

Seen from the front, this plane closely resembles the L. V. G. C6. There are two pairs of interplane struts, a slight dihedral, the exhaust pipe protruding over the top plane, and the radiator set into the central section of top plane. The ailerons are overhanging and balanced, resembling somewhat those of the Fokker D7. The tips of the top plane are cut back somewhat similar to those of the preceding models, but the effect is somewhat modified by the protruding of the ailerons. The trailing edges of the lower planes are cut away at the tips but not at the fuselage and in consequence the pilot's view vertically below is somewhat restricted.

The tail plane surfaces are of characteristic Halberstadt shape except that the rudder is not so high as in previous models and is less pointed.

## MOTOR :

The motor supplied is a Benz 220 H. P., which is said to be very reliable and is now common on German Reconnaissance Planes.

## ARMAMENT :

A Spandau gun, synchronized and firing through the propellor, is fitted at the left of the pilot, and the observer is supplied with a parabellum on this turret. There are no bomb racks on this machine.

## CAMOUFLAGE :

Planes are camouflaged in usual German fashion, and the fuselage is painted a slate color, fading to a dull green near the tail. The rudder is white.



**GAS TANK :**

The gasoline tank is placed under the pilot's seat and is supplied with a float gauge reading to 210 liters (about 46 gallons).

**EQUIPMENT :**

The plane is equipped with wireless apparatus and is wired for electrically-heated clothing. The observer's cockpit is supplied with a laragraph. A large compass of the floating card type is set into the lower left wing. An anemometer is attached to one of the forward right hand struts with its dial in the pilot's cockpit. Set into the pilot's windshield is a small revolution counter. A thermometer is set into the pipe leading to the radiator.

NOTE.—Photographs of this plane are being prepared and will be available for distribution in a few days.

**OPERATIONS**

October 26, 1918.—No night operations were possible on account of weather conditions. Several reconnaissance missions were carried out, and in the course of patrols over the enemy lines several formations of enemy aircraft were encountered. At least one hostile plane was shot down.

**SUMMARY OF OFFICIAL COMMUNIQUEES**

OCTOBER 27, 1918.

**AMERICAN.**

(October 27, 1918, morning.) N. of VERDUN the enemy renewed without success his attempts to regain the ground lost in recent fighting. Yesterday evening an attack launched with strong forces against our positions between BANTHEVILLE and the Bois des RAPPES broke down under our artillery fire before reaching our lines. E. of the MEUSE there has been sharp fighting in the region of the Bois BELLEU.

On the front of the Second Army there was lively artillery fighting in the WOEVRE.

(October 27, 1918, evening.) On the VERDUN front E. of the MEUSE infantry and artillery fighting was in progress throughout the day in the region of the Bois BELLEU. W. of the MEUSE there has been heavy artillery and machine-gun fire S. of AINCREVILLE and N. of the AIRE.

The improvement in the weather has made possible active aerial operations on the front of the 1st Army. Our pursuit squadrons engaged the enemy in many combats, in the course of which 13 enemy airplanes and five of our machines were shot down. Our bombing units dropped three and one half tons of explosives on BRIQUENAY.

**FRENCH.**

(October 27, 1918, morning.) During the night the troops of the 1st Army increased their efforts on the front between the OISE and the SERRE. The enemy staggered by yesterday's fighting has given way all along the line and has been forced to retire toward the north, abandoning the positions which he was occupying.

We have taken MONT D'ORIGNY, ORIGNY-SAINTE-BENOITE, COURJUMELLES and CHEVRESIS-MONCEAU, as well as numerous fortified points of support between the villages.

On our right units have crossed the PERON and are advancing toward the northeast. We have taken HILL 117 and the sugar mill 1,500 meters to the E. of RICHECOURT. The number of our prisoners is increasing.

On the SERRE front the Xth Army, supporting the movement of the 1st, has likewise made gains. We have crossed the SERRE E. of ASSIS and penetrated the German trenches.

E. of SISSONNE a violent German counter-attack in the region of the MARQUIGNY Farm was broken up by our fire. Artillery fighting continues lively on the front from BANOGNE ton NANTEUIL. The number of prisoners that we have made in the fighting of the 25th and 26th between SISSONNE and CHATEAU-PORCIEN, exceeds 2,450, including 51 officers. The night was quiet on the rest of the front.

**BRITISH.**

(October 27, 1918, morning.) After a heavy bombardment yesterday evening the enemy launched a determined counter-attack with large forces against our positions on the railway immediately N. W. of LE QUESNOY. The attack was completely repulsed by our rifle and machine-gun fire with great losses to the German troops.

(October 27, 1918, evening.) A hostile counter-attack preceded by a heavy bombardment was made this morning against our line in the neighborhood of ENGLEFONTAINE. The enemy was repulsed leaving many dead and our positions were maintained intact. During the afternoon a counter-attack launched by the enemy against our position in the neighborhood of ARTRES was also repulsed with heavy loss. We have captured a few prisoners in patrol actions on different parts of the front.

AVIATION. On October 26, a great deal of reconnaissance and photographic work was accomplished by our squadrons and nearly 8 1/2 tons of bombs were dropped, important railway stations being attacked with excellent results. The enemy's aircraft showed some activity over the northern battle front and in air fighting eight of his machines were destroyed and three more were driven out of control. Two enemy balloons were shot down in flames. Nine of our machines are missing. In spite of very unfavorable weather conditions some of our night flying machines succeeded in dropping over three tons of bombs on railway junctions and other targets in the enemy's line of communication; all these machines have returned.

**ITALIAN.**

(October 27, 1918, 4 p. m.) On MTE. GRAPPA repeated heavy and persistent attacks launched by the enemy yesterday localized the fighting in the areas of MTE. ASOLONE and MTE. PERTICA and at the salient of MTE. SOLAROLO. The enemy was repulsed with heavy losses and 514 prisoners remained in our hands.

On the Middle PIAVE combat activity has greatly increased. Yesterday the occupation of GRAVE di PAPADOPOLI was completed and 351 more prisoners were captured. Large hostile forces launched in counter-attack, especially against the British troops, were destroyed.

AVIATION. Our own and Allied aircraft showed great activity, carrying out powerful bombardments in the enemy's lines of communication and repeatedly firing on troops in position and on the march. Ten hostile planes were brought down in the course of air combats. On the railway station of LEVICO, which was surprised in full activity, 400 kg. of bombs were dropped last night by one of our airships.

**BELGIAN.**

(October 27, 1918.) Nothing of importance took place on the front of the Franco-Belgian Armies. The 2d British Army again advanced toward the SCHELDT, capturing AVELGHEM.

**GERMAN.**

(October 27, 1918, 12.50 p. m.) WESTERN FRONT. Army Group of Crown Prince Rupprecht. No operations of importance occurred in FLANDERS. The enemy is continuing the destruction of Belgian villages behind the front. In OOTEGEM and in INGOGEM the population, which had taken refuge in the cellars from the bombardment by incendiary shells, was to a large extent killed. Heavy hostile attacks S. of the SCHELDT, between FAMARS and ARTES, were repulsed.

in counter-attack. In the course of local attacks the enemy succeeded in penetrating ENGLEFONTAINE and HECQ. He was driven out of the latter village in counter-attack.

Army Group of the German Crown Prince. The French continued their attacks on the front from the OISE to the AISNE. They were repulsed on both sides of ORIGNY before reaching our lines. The enemy, who had penetrated our position near PLEINE-SELVE, was checked on the hill N. E. of the village; his attempts to break our front along the OISE by attacking from this point in a northerly direction broke down with very heavy losses for the enemy. ORIGNY and the hills S. E. of the place were held. Many hostile tanks were destroyed. The batteries under command of Lieutenant Meyhoefer, of the 1st Reserve Field Artillery Regiment, Lieutenant Zuppke, of the 37th Field Artillery Regiment, and Lieutenant Otto of the 445th Infantry Regiment, had a large part in this. In the SERRE sector hostile attacks launched from MORTIERS were checked in front of our lines. Violent attacks on the SOUCHE sector between FROIDMONT and PIERREPONT were repulsed by Posen and Wurtemberg regiments. Towards evening the 37th Fusilier Regiment, the 119th Grandier Regiment and the 121st Infantry Regiment again broke up heavy hostile attacks at this point. The enemy's infantry remained inactive yesterday on both sides of Sissonne. On the hills W. of the AISNE a local counter-attack launched by us against the SACHSENWALD met heavy attacks directed by the enemy on distant objectives between NIZY-LE-COMTE and the AISNE. The enemy suffered heavy losses under our artillery fire on crossing the hills N. W. of NIZY-LE-COMTE. At this place, as well as W. of BANOGNE, the enemy's attacks broke down completely. In the terrain W. of the AISNE, which is full of ravines and thickly wooded, the fighting continued during the day with severity; by evening the combats were decided in our favor, approximately along the BANOGNE-CHATEAU PORCIEN road and near HERPY.

Along the AISNE front and in the Army Group of von Gallwitz, on both sides of the MEUSE, there were no actions of importance.

(October 27, 1918, 7.38 p. m.) The day passed without important engagements.

NOTE.—The Official Communiqué of to-day is signed by the Chief of Staff of the Field Army instead of by the First Quartermaster General, Ludendorff, who, according to a German wireless message, has resigned.

## SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

## FLANDERS REGION.

40th Pursuit Flight. . . . . E. of Brussels . . . . . October 21 . . . . . Prisoner's statement, French source.

This flight was last identified last March at which time it was known to have left Mars-la-Tour (Argonne-Moselle region). Prisoner states that this flight was recently in the Menin area (Flanders region), but left there following the attack of September 28 and moved to the Brussels area.

## LYS-VIMY REGION.

5th Bombing Squadron. . . . . Brussels area . . . . . October 14 . . . . . Prisoner's statement, R. A. F.

Prisoner states that this squadron was on the move from Ath to Brussels on October 14; it had recently arrived from Orcq and other airdromes near Tournai.

NOTE.—This squadron was identified in the Tournai area on September 6, and it is probable that the identification in Noyon-Argonne region on September 29 was incorrect.

## IDENTIFICATIONS

Nil.

## AIRDROMES

Nil.

## ENEMY AIR ORDER OF BATTLE—ARGONNE TO SWISS BORDER, OCTOBER 28, 1918

## ARGONNE-MOSELLE REGION.

*Pursuit Flights:*

\*4th—Joppecourt (Airdrome No. 53).  
\*6th—Joppecourt (Airdrome No. 53).  
\*10th—Joppecourt (Airdrome No. 53).  
\*11th—Joppecourt (Airdrome No. 53).  
12th—Marville (Airdrome No. 30).  
13th—Marville (Airdrome No. 30).  
15th—Marville (Airdrome No. 30).  
18th—Bruville area (probably Conflans Airdrome No. 72).  
19th—Marville (Airdrome No. 30).  
64th—Mars-la-Tour (before the advance).  
65th—Mars-la-Tour (before the advance).  
67th—Marville (Airdrome No. 30).

*Bombing Flights:*

28th (?)—Cosnes (Airdrome No. 19).  
29th (?)—Cosnes (Airdrome No. 19).  
30th (?)—Cosnes (Airdrome No. 19)

*Battle Flights:*

2d—Autrecourt (Airdrome No. 103).  
5th—Virton (Airdrome No. 67).  
20th—Virton (Airdrome No. 67).  
21st—Virton (Airdrome No. 67).  
32d—Unlocated.  
33d—Virton (Airdrome No. 67).  
37th—Thonne-les-Pres (Airdrome No. 54).  
45th—Unlocated.

*Reconnaissance Flights:*

29th—West of Briey (probably Briey Airdrome No. 16).  
31st—Ozerailles (Airdrome No. 32).  
36th—Jamez S. (Airdrome No. 76 S.).  
37th—Doncourt (Airdrome No. 72).  
44th—Unlocated.  
46th—Briey (Airdrome No. 58).  
47th—Unlocated.  
203d—Jamez N. (Airdrome No. 76 N.).  
206th—Unlocated.  
215th—Probably at Buzancy (Airdrome No. 101).  
219th—Jamez S. (Airdrome No. 76 S.).  
232d—Ozerailles (Airdrome No. 32).  
246th—Briey (Airdrome No. 58).  
274th—Stenay (Airdrome No. 57).  
279th—Ozerailles (Airdrome No. 32).  
\*280th—Longuyon (Airdrome No. 56).  
296th—Conflans area.  
298th—Buxieres (before the advance).

## MOSELLE-VOSGES REGION.

*Pursuit Flights:*

28th—Metz area.  
63th—Metz area.  
78th—Buhl (Airdrome No. 6).  
80th—Marimont (Airdrome No. 47).  
84th—Frescaty (Airdrome No. 7).

*Bombing Flights:*

25th—Boulay (Airdrome No. 61).  
26th—Boulay (Airdrome No. 61).  
27th—Boulay (Airdrome No. 61).

*Battle Flights:*

None.

*Reconnaissance Flights:*

12th—Many (Airdrome No. 11).  
67th—Lorquin (Airdrome No. 12).  
100th—Morhange (Airdrome No. 8).  
199th—Bensdorf (Airdrome No. 45).  
218th—Unlocated.  
242d—Frescaty (Airdrome No. 7).  
257th—Morhange (Airdrome No. 8).  
275th—Metz area.  
281st—Lorquin (Airdrome No. 12).

*Home Defense Flights:*

1st—Bitche (Airdrome No. 107).  
2d—Folpersweiler (Airdrome No. 60).  
3d—Morhange (Airdrome No. 8).  
8th—Bitche (Airdrome No. 107).

## VOSGES-SWITZERLAND REGION.

*Pursuit Flights:*

69th—Habsheim (Airdrome No. 26).  
70th—Stotzheim (Airdrome No. 89).  
71st—Habsheim (Airdrome No. 26).  
75th—Habsheim (Airdrome No. 26).  
76th—Habsheim (Airdrome No. 26).

*Reconnaissance Flights:*

4th—Hagenau (Airdrome No. 55).  
10th—Schlestadt (Airdrome No. 4).  
43d—Schlestadt (Airdrome No. 4).  
243d—Colmar (Airdrome No. 28).  
267th—Habsheim (Airdrome No. 26).  
282d—Sierentz (Airdrome No. 27).

\*Flights in which change in locations has occurred.

*Home Defense Flights :*

- 4-B—Fribourg (Airdrome No. 2).
- 5th—Neuf-Brisach (Airdrome No. 23).
- 6th—Neuf-Brisach (Airdrome No. 23).
- 14th—Lahr (Airdrome No. 41).
- (?)—Karlsruhe (Airdrome No. 63).

*Mosaic Sections :*

- 4th—Altdorf (Airdrome No. 88).

*Battle Flights :*

None.

*Bombing Flights :*

None.

**ENEMY AERIAL ACTIVITY**

October 27, 1918.—Hostile planes were active during the day between Grandpre and the Meuse and in the region of Moselle. Pursuit planes were most active on our extreme left. Also quite a number of them operating just behind their own lines and repeatedly attacking our formations. In several instances they used their machine guns on our troops in the front line. Quite a number of readjustment and reconnaissance planes were reported during the day, especially on our extreme left and E. of the Meuse. One deep reconnaissance over the region of Clermont, in Argonne, and west of Lake La Chaussee. Propaganda was dropped over our lines on various parts of our front. Only a few hostile balloons reported in ascension.

October 28, 1918.—Visibility : Bad. Hostile pursuit aviation showed marked increase on our right, and was also quite active on our extreme left. Reconnaissance and adjustment planes were moderately active along our whole front. There were no deep reconnaissances reported. On our left enemy planes flew over our lines dropping bombs and hand-grenades and using their machine guns. One plane dropped bombs on Sommerance in the morning.

**OUR AERIAL ACTIVITY**

October 27, 1918.—Visibility, poor to fair, characterized by gathered clouds and haze throughout the day. No night expedition sent out on account of weather conditions ; the weather improved during the day, enabling our units to assume active operations. Pursuit planes maintained a continued patrol over the sector and engaged in numerous combats. Our observation planes carried out numerous infantry contacts, photographic and reconnaissance missions. Bombing squadrons attacked Briquenay, dropping a total of more than 3 1/2 tons of bombs on the targets where good hits were observed. During the day 13 enemy planes were brought down ; five of our planes are missing.

October 28, 1918.—Night reconnaissance was impossible on account of atmospheric conditions. Pursuit planes maintained their usual protective patrols during the day. Army observation planes reconnoitered the areas between Damvillers, Dun, Mouzay, and Grandpre. In addition, numerous reconnaissances were executed throughout the sector, propaganda was dropped over the enemy's lines, and troops in the streets of Bayonville were machine-gunned. Four planes were brought down in combat during the day, and at dawn one of our pursuit planes set fire to a hostile balloon on the ground at Bran-deville. One of our planes reported yesterday as lost has since returned. No bombing missions were executed.

**DISTRIBUTION OF IDENTIFIED GERMAN AIR UNITS, OCTOBER 28, 1918**

Region.	Pursuit.		Reconnaissance.		Battle.		Bombing.	
	Oct. 27.	Oct. 28.	Oct. 27.	Oct. 28.	Oct. 27.	Oct. 28.	Oct. 27.	Oct. 28.
Flanders .....	8	9	7	7	2	2	6	6
Lys-Vimy .....	7	7	19	19	3	3	3	6
Vimy-Noyon .....	23	23	38	38	12	12	9	9
Noyon-Argonne .....	21	21	45	45	16	16	6	3
Argonne-Moselle .....	12	12	18	18	8	8	3	3
Moselle-Vosges .....	5	5	9	9	..	..	3	3
Vosges-Switzerland .....	5	5	7	7	..	..	..	..
Exterior Fronts .....	2	2	20	20	..	..	..	..
Unlocated .....	2	1	1	1	1	1	..	..
Total .....	85	85	164	164	42	42	30	30

Total identified flights (all classes) on all fronts, October 28—348.  
Total estimated machines belonging to such flights—3,006.

**HALBERSTADT BIPLACE BIPLANE**

*Combat Type C.L.2*

(PHOTOGRAPHS ATTACHED).

- MAXIMUM SPREAD : 34 ft. 8 in.
- OVERALL LENGTH : 24 ft.
- TOTAL MAIN PLANE AREA : 282 sq. ft.

WING SHAPE : Planes are equal and of trapezoidal form, with rounded corners. Slight dihedral in lower plane and none in upper. There is a slight stagger. Radiator is mounted in upper plane to right of the pilot. One pair of parallel interplane struts on each side of fuselage. Upper plane is close to the fuselage like Pfalz or Albatros Scout.

AILERONS : On top plane only and balanced.

RUDDER AND TAIL FIN : Very similar to those of L. V. G. Their unusual height gives an easy means of recognition.

**ELEVATORS AND TAILPLANE :** Shape similar to those of Albatros. Elevators in one piece and not balanced.

**FUSELAGE :** Parallel sides with curved top and bottom. The nose is sharp. Main gasoline tank under pilot's seat. Pilot has excellent visibility.

**ENGINE :** 180-h. p. Mercedes.

**ARMAMENT :** Spandau machine gun fixed and firing through the propeller. Parabellum gun mounted on observer's turret. This gun has excellent field of fire, across the top wing as well as to the rear.

**WEIGHT :**

Empty.....	1,755 lbs.
Load .....	815 lbs.
Total .....	2,570 lbs.

**PERFORMANCE :** Practically as good as the Albatros Scout. It is swift, very handy for a double seater, and a good climber, while its arrangement of guns makes it useful as a battle plane.

**NOTE.**—Recently this plane, as well as the Hanover, has been most generally used for low flying to attack ground troops. In this capacity it may carry a few small bombs and has been reported with an additional machine-gun firing downward and forward through the floor of the cockpit.

## SUMMARY OF OFFICIAL COMMUNIQUEES

OCTOBER 28, 1918.

### AMERICAN.

(October 28, 1918, morning.) On the VERDUN front E. of the MEUSE our troops yesterday carried out a successful local attack against the Bois BELLEU. As a result of this operation, this wood, which has been the scene of constant fighting since October 25, is entirely in our hands. Farther S. lively combats are in progress in the eastern portion of the Bois d'ORMONT. Artillery fire has been violent on the front from Bois DE LA GRANDE MONTAGNE to the Bois DES CAURES.

W. of the MEUSE hostile elements, which attempted under cover of heavy shelling to penetrate our positions N. of GRANDPRE, were repulsed by our machine-gun fire.

In other sectors held by our troops the day was quiet.

(October 28, 1918, evening.) On the VERDUN front the day was marked by heavy artillery fire on both sides of the MEUSE. An enemy counter-attack against the Bois BELLEU was repulsed. In the WOEVRE our detachments successfully raided the enemy's lines and captured prisoners.

In spite of poor weather conditions, our aviators were again active on the front of the 1st Army and shot down three enemy airplanes and one observation balloon. All our machines returned.

### FRENCH.

(October 26, 1918.) ARMY OF THE ORIENT. The Serbian troops, continuing their vigorous pursuit in spite of the bitter resistance of the enemy and very bad weather, reached, October 25, the heights to the S. of KRAGUJEVAC. In the valley of the MORAVA they are in the southern outskirts of CUPRIJA. The enemy set fire to the station and to stores at KRAGUJEVAC. It has been confirmed that in the course of their retreat the Austro-German troops committed atrocities of all sorts and despoiled the inhabitants.

(October 27, 1918, evening.) The enemy, closely pursued by our advance guards, continued to fight rearguard actions, between the OISE and the SERRE, on a front of more than 25 kilometers. Our advance at certain points was in the course of the day more than 8 kilometers. On our left we captured BOHERIES, PROIX, and MACQUIGNY, and pushed our advanced elements as far as the outskirts of GUISE. Farther S. our units reached the road from GUISE to MARLE on the general line PROIX-LANDIFAY-et-BERTAIGNEMONT—W. of FAUCOUZY—MONCEAU-le-NEUF—MONTIGNY-sur-CRECY. We made numerous prisoners and captured a considerable amount of matériel.

Since October 24 the number of prisoners made by the 1st Army reached 3,700. In the spoil captured by it since the same date were 20 cannon and several hundred machine-guns.

On the SERRE front the Xth Army, in close liaison with the 1st, pushed the enemy vigorously toward the N. Our troops occupied CRECY-sur-SERRE and went some distance beyond it.

W. of CHATEAU-PORCIEN the fighting of the last two days similarly compelled the enemy to abandon a part of the Hunting line which he still held between HERPY and RECOUVRENCE. Our units continue to progress, maintaining close contact with the enemy.

There is nothing further to report.

(October 28, 1918, morning.) Between the OISE and the SERRE our elements, keeping close contact with the enemy's rear-guards, continued to advance during the night. We have occupied LA MOTTE Farm, W. of GUISE, have reached the outskirts of LE HERIE—LA-VIEVILLE, have passed beyond MONCEAU-le-NEUF, and have pushed our lines up to the western edge of PARGNY-LES-BOIS.

On the SERRE front we have captured HILL 123, N. of CRECY. Farther E. we have gained a footing in the hostile trenches N. of FROIDMONT-COHARTILLE, and we have held our ground in spite of several counter-attacks. We took prisoners.

E. of RETHEL American units brilliantly carried out a successful local operation in the course of which they advanced about one kilometer in the region of the FOREST Farm, E. of ATTIGNY. They took 172 prisoners, including four officers.

(October 28, 1918, evening.) On the OISE there has been severe fighting on the E. bank of the river before GRAND VERLY, where the enemy made several counter-attacks. Farther S. we advanced our lines to the region of the OISE and took several strong points N. W. of GUISE. We also made progress to the E. of the PERON in the region of Bois-le-PARGNY. On the whole front between the OISE and the SERRE our troops are in contact with the new enemy line.

W. of CHATEAU-PORCIEN we made an advance to the N. of HERPY. There is nothing else of importance to report.

**AVIATION.** The work of our aviation on October 27 was marked by great activity, although the dense fog rendered the work particularly difficult.

Our observers, making numerous reconnaissances over the entire back areas of the enemy's lines, reported valuable information and took numerous photographs. They reported in particular fires in most of the localities on the right bank of the AISNE, which is still in the hands of the enemy, as well as in the valley of the SERRE, between MARLE and MONTCORNET.

Our bombers, under the protection of combat planes, made several expeditions in the region of SERAINCOURT, and with an audacity which brought good results. This village at the junction of several roads has played an important part in the enemy's supplies during the battle in which our Vth Army has been engaged between Sissonne and CHATEAU-PORCIEN. One hundred and twenty bombing planes and 80 pursuit planes undertook the attack on designated objectives by successive groups, attacking especially the supply trains, the ammunition dumps, and the camps of the region, as well as troops reported in the ravines to the S. of SERAINCOURT. Thirty-three tons of projectiles and 15,000 cartridges were used, causing severe losses to the enemy, and great confusion and in certain places total stoppage of traffic. Besides this, numerous fires in the camps were reported, as well as the explosion of an ammunition depot. In the course of the day's operations nine enemy planes were brought down, and one captive balloon was brought down in flames. As the fog became absolutely opaque it completely concealed the work of the night. Sub-Lieutenant Morinovich brought down his 20th enemy plane and Adjutant Mace his 10th.

BRITISH.

(October 28, 1918, morning.) The enemy yesterday launched a violent counter-attack on FAMARS village and was repulsed after street fighting in which many of the enemy were killed.

We have slightly improved our positions on the borders of MORMAL Forest and N. of the Forest of RAISMES.

(October 28, 1918, evening.) As the result of a local operation carried out by us this morning S. of VALENCIENNES, we advanced our line between the River RHONELLE and the SCHELDT in the face of considerable opposition and captured over 100 prisoners.

On the remainder of the front there is nothing of special interest to report.

BELGIAN.

(October 28, 1918.) The interchange of artillery fire attained considerable proportions on the S. of our front yesterday. One of our aviators brought down an enemy balloon in flames.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

### NOYON-ARGONNE REGION.

223d Reconnaissance Flight..... Quatre Champs ..... Septeml er 26..... Document, R. A. F.  
Last identified in Vimy-Noyon region, June 5, 1918.

## IDENTIFICATIONS

Nil.

## AIRDROMES

### MOSELLE-VOSGES REGION.

Change in accommodation.			Present accommodation.		
Hangars.	Sheds.	Capacity.	Hangars.	Sheds.	Capacity.
1. Changes in existing airdromes:—					
6.	Buhl .....	+2 ..	38	6	113
	Increase since September 9, 1918.	French photo, October 21, 1918.			
12.	Lorquin .....	—1 ..	21	..	42
	Decrease since September 16, 1918.	French photo, October 21, 1918.			
47.	Marimont .....	—1 ..	9	..	27
	Decrease since September 4, 1918.	French photo, October 23, 1918.			
2. Photographs of the following airdromes show no change:—					
45.	Bensdorf .....	.. ..	1	4	7
	French photo, October 23, 1918.				
98.	Hattigny .....	.. ..	16	..	34
	French photo, October 21, 1918.	This airdrome may be considered unoccupied. The last three photographs show no signs of occupation and no flights have been identified here.			

## ENEMY AIR ORDER OF BATTLE—ARGONNE TO SWISS BORDER, OCTOBER 29, 1918

### ARGONNE-MOSELLE REGION.

#### Pursuit Flights:—

\*4th—Joppecourt (Airdrome No. 53).  
\*6th—Joppecourt (Airdrome No. 53).  
\*10th—Joppecourt (Airdrome No. 53).  
\*11th—Joppecourt (Airdrome No. 53).  
12th—Marville (Airdrome No. 30).  
13th—Marville (Airdrome No. 30).  
15th—Marville (Airdrome No. 30).  
18th—Bruville area (probably Conflans Airdrome No. 72).  
19th—Marville (Airdrome No. 30).  
64th—Mars-la-Tour (before the advance).  
65th—Mars-la-Tour (before the advance).  
67th—Marville (Airdrome No. 30).

#### Bombing Flights:—

28th (?)—Cosnes (Airdrome No. 19).  
29th (?)—Cosnes (Airdrome No. 19).  
30th (?)—Cosnes (Airdrome No. 19).

#### Battle Flights:—

2d—Autrecourt (Airdrome No. 103).  
5th—Virton (Airdrome No. 67).  
20th—Virton (Airdrome No. 67).  
21st—Virton (Airdrome No. 67).  
32d—Unlocated.  
33d—Virton (Airdrome No. 67).  
37th—Thonne-les-Pres (Airdrome No. 54).  
45th—Unlocated.

#### Reconnaissance Flights:—

29th—West of Briey (probably Briey Airdrome No. 16).  
31st—Ozerailles (Airdrome No. 32).  
36th—Jametz S. (Airdrome No. 76 S.).  
37th—Doncourt (Airdrome No. 72).  
44th—Unlocated.  
46th—Briey (Airdrome No. 58).  
47th—Unlocated.  
203d—Jametz N. (Airdrome No. 76 N.).  
206th—Unlocated.  
215th—Probably at Buzancy (Airdrome No. 400).  
219th—Jametz S. (Airdrome No. 76 S.).  
232d—Ozerailles (Airdrome No. 32).  
246th—Briey (Airdrome No. 58).  
274th—Stenay (Airdrome No. 57).  
279th—Ozerailles (Airdrome No. 32).  
\*280th—Longuyon (Airdrome No. 56).  
296th—Conflans area.  
298th—Buxeres (before the advance).

### MOSELLE-VOSGES REGION.

#### Pursuit Flights:—

28th—Metz area.  
\*63d—Metz area.  
78th—Buhl (Airdrome No. 6).  
80th—Marimont (Airdrome No. 47).  
84th—Frescaty (Airdrome No. 7).

#### Reconnaissance Flights:—

12th—Many (Airdrome No. 11).  
67th—Lorquin (Airdrome No. 12).  
100th—Morhange (Airdrome No. 8).  
119th—Bensdorf (Airdrome No. 45).  
218th—Unlocated.  
242d—Frescaty (Airdrome No. 7).  
257th—Morhange (Airdrome No. 8).  
275th—Metz area.  
281st—Lorquin (Airdrome No. 12).

#### Bombing Flights:—

25th—Boulay (Airdrome No. 61).  
26th—Boulay (Airdrome No. 61).  
27th—Boulay (Airdrome No. 61).

#### Battle Flights:—

None.

#### Home Defense Flights:—

1st—Bitche (Airdrome No. 107).  
2d—Folpersweiler (Airdrome No. 63).  
3d—Morhange (Airdrome No. 8).  
8th—Bitche (Airdrome No. 107).

### VOSGES-SWITZERLAND REGION.

#### Pursuit Flights:—

69th—Habsheim (Airdrome No. 26).  
70th—Stotzheim (Airdrome No. 89).

#### Reconnaissance Flights:—

4th—Hagenau (Airdrome No. 55).  
10th—Schlestadt (Airdrome No. 4).

\* Flights in hich change in locations has occurred.

71st—Habsheim (Airdrome No. 26).	43d—Schlestadt (Airdrome No. 4).
75th—Habsheim (Airdrome No. 26).	243d—Colmar (Airdrome No. 28).
76th—Habsheim (Airdrome No. 26).	267th—Habsheim (Airdrome No. 26).
	282d—Sierentz (Airdrome No. 27).
	289th—Habsheim (Airdrome No. 26).
Home Defense Flights:—	
4-B—Erlbourg (Airdrome No. 2).	
5th—Neuf-Brisach (Airdrome No. 23).	Mosaic Sections:—
6th—Neuf-Brisach (Airdrome No. 23).	4th—Altdorf (Airdrome No. 88).
14th—Lahr (Airdrome No. 41).	
(?)—Karlsruhe (Airdrome No. 65).	Battle Flights:—
	None.
Bombing Flights:—	
None,	

ACTIVITY

OUR AERIAL ACTIVITY

Visibility : fair. Some haze throughout the day. Attempted light reconnaissance missions were unsuccessful on account of low visibility. Protective patrols were maintained by our pursuit squadrons. Favorable weather during the day enabled our observation planes to do a considerable amount of work, especially on our left. Four observation squadrons carried out a great number of reconnaissances, photographic, infantry contact, and artillery reglage missions from early morning to late in the afternoon, during the course of which they were frequently attacked by the enemy, and in turn gave combat to enemy aircraft ; also machine-gunned troops on the ground. Our army observation planes were also very active throughout the day. Many photographic and five visual reconnaissance missions were carried out. Pursuit planes patrolled the entire front and during the day engaged in many combats, bringing down 17 enemy planes. Two more hostile planes were brought down by an observation squadron, making a total of 19 for the day. Five of our planes are missing. Bombing squadrons bombed Montigny and Damvillers, dropping a total of 3 1/2 tons of bombs on these targets with good result.

ENEMY AERIAL ACTIVITY

Enemy aviation was exceptionally active throughout the day on the whole army front. Pursuit planes patrolled the lines continuously, often in large formations, and engaged in many combats with our forces. Several of our balloons were attacked, one of which was burnt by enemy aircraft. Reglage and reconnaissance planes were also very active. Bombing planes dropped bombs on the Bois de Brieuilles, Montfaucon, Buisy, Gercourt, and Lesmesnils. At about 2 p. m., nine Fokker planes at an altitude of approximately 21,000 feet appeared in the region S. W. of Ligny-en-Barrois. A considerable amount of propaganda was also dropped on other parts of our sector, notably in vicinity of Lesmesnils and La Chaussée. A few hostile balloons were reported in ascension.

DISTRIBUTION OF IDENTIFIED GERMAN AIR UNITS, OCTOBER 29, 1918

Region.	Pursuit.		Reconnaissance.		Battle.		Bombing.	
	Oct. 28.	Oct. 29.	Oct. 28.	Oct. 29.	Oct. 28.	Oct. 29.	Oct. 28.	Oct. 29.
Flanders .....	9	9	7	7	2	2	6	6
Lys-Vimy .....	7	7	19	19	3	3	6	6
Vimy-Noyon.....	23	23	38	37	12	12	9	9
Noyon-Argonne.....	21	21	45	46	16	16	3	3
Argonne-Moselle.....	12	12	18	18	8	8	3	3
Moselle-Vosges .....	5	5	9	9	..	..	3	3
Vosges-Switzerland.....	5	5	7	7	..	..	..	..
Exterior Fronts .....	2	2	20	20	..	..	..	..
Unlocated .....	1	1	1	1	1	1	..	..
Total .....	85	85	164	164	42	42	30	30

Total identified flights (all classes) on all fronts, October 29—348.  
Total estimated machines belonging to such flights—3,006.

SUMMARY OF OFFICIAL COMMUNIQUÉS

OCTOBER 29, 1918

AMERICAN.

(October 29, 1918, morning.) Artillery and machine gun fire continued heavy during the night on the front of the First Army N. of VERDUN, reaching particular intensity in the region of the Bois BELLEU and the Bois d'ORMONT. From the remainder of the front there is nothing of importance to report.  
(October 29, 1918, evening.) On the VERDUN front there has been heavy artillery and machine gun fire today W. of the MEUSE, especially in the region N. of SAINT-JUVIN.  
With more favorable weather conditions, there has been increased aerial activity on the front of the 1st Army throughout the day. Our pursuit squadrons engaged the enemy in numerous combats, in the course of which 18 enemy airplanes were shot down. Five of our machines did not return. Our aviators also carried out important reconnaissance and photographic missions.

FRENCH.

(October 29, 1918, morning.) Artillery fighting was lively in the region of the OISE, particularly opposite GRAND VERLY. During the night, our troops, overcoming the resistance of the enemy, advanced close to GUISE. They captured the hospital barracks outside the station and the first trench of a fortified position S. of the chateau.  
Farther S. we passed LOUVRE Farm. To the right of the PERON our elements continued to advance E. of MON-CEAU-LE-NEUF, and took about 40 prisoners. On the SERRE front there was great machine gun activity. Our patrols are everywhere in contact with the enemy.  
There is nothing to report on the remainder of the front.



(October 29, 1918, evening.) Between the OISE and the SERRE the day was marked by lively artillery engagements, particularly in the neighborhood of CRECY-SUR-SERRE. W. of CHATEAU-PORCIEN the tireless troops of the Vth Army today started a new push between SAINT-QUENTIN-LE-PETIT and HERPY, on a front of 12 kilometers. The battle began with splendid impetus on our side and with great obstinacy on the part of the enemy, who had been ordered to hold at all costs. On our left, in spite of the large numbers of hostile machine guns, which tried to check our advance, we succeeded in passing beyond SAINT-QUENTIN-LE-PETIT and advanced our lines to the edge of HILL 137. W. of BANOGNE we also made progress.

In the center our troops, breaking all resistance, threw the enemy back beyond the RECOUVRANCE-SAINT-FERGEUX road on a front of 3 kilometers to the E. of the signal station of RECOUVRANCE. On the right we took HILL 156 and advanced farther E.. Over 850 prisoners have already been counted.

There is nothing further to report.

AVIATION. The good weather on October 28 was favorable to the operations of our aviators. They carried out deep reconnaissance work and brought back several hundreds of photographs, many of which were taken 30 to 50 kilometers from the front. Nine hostile airplanes were shot down or fell disabled in the course of combats and a balloon was set on fire by one of our machines. During the night, and in spite of poor visibility, our bombing planes dropped 16 tons of bombs on large stations and concentration points, particularly on the stations of HIRSON, VERVINS, SAINT-GABERT, MONT-CORNET, MARLES, AUDUN-LE-ROMAN, on the aviation field at MARS-la-TOUR, and on the immense depots at PROVISY. Many fires were started, principally at PROVISY, HIRSON, and MARLES.

(October 27, 1918.) Army of the Orient. The Allied forces, continuing their northward progress, took, after fighting, the important cities of KRAGUEVAC and JAGODINA, together with the coal mines of SENGE and RAVANICA. The Serbian cavalry captured DESPOTOVAC.

#### BELGIAN.

(October 28, 1918.) The French troops, continuing their pressure on the enemy, made marked progress on the right bank of the Lys. They reached the railroad between PETEGEM and WEREGER and crossed this railroad at several points. The hostile artillery was active all day on the entire front.

#### BRITISH.

(October 29, 1918, morning.) Except for artillery activity and patrol engagements at various points on the front, there is nothing to report.

#### ITALIAN.

(October 29, 1918, 6.35 a. m.) Yesterday, in the course of the day the enemy launched violent and obstinate attacks on MONTE GRAPPA, but in spite of the violence of his efforts his attacks were localized in the area of the ASOLONE and PERICA and in the salient of SOLAROLO. Everywhere the enemy was repulsed with very heavy losses. We took 514 prisoners. On the center of the PIAVE front yesterday the fighting activity increased during the day. We have taken the whole of the GRAVE DI PAPADOPOLI and captured 350 prisoners. The hostile forces, launched in great numbers in counter-attack, principally against the British troops, were repulsed.

Italian and Allied air service displayed great activity and carried out strong bombing expeditions against hostile troops behind the lines; as well as against several regiments in movement. Ten Austrian planes were shot down in the course of air fighting. One of our dirigibles during the night dropped 400 kilograms of explosives on the station of LEVICO, which was surprised in full activity.

The development of the Italian offensive continues in spite of the difficulties of the terrain and of the resistance which the enemy is opposing everywhere. News from various sources proves clearly that if the interior of Austria-Hungary is breaking up, the army, on the contrary, is trying to concentrate its strength on the Italian front. Two facts prove this: The knowledge of the nomination of Archduke Joseph to the supreme command of the Austro-Hungarian forces against Italy, and the similarity of the statements of all prisoners taken the last few days. The prisoners all make statements to the effect that the combatants are kept in ignorance of everything going on in the world and in the interior of the monarchy.

(October 29, 1918, 3.47 p. m.) The battle, which continued fiercely during the night and the day, is in full development. On the front of the 12th and 8th Armies, in spite of the enemy's lively opposition, we maintained and extended the bridge-head. To the N. of the ORNIC Torrent we gained advantages. To the E. of the GRAVE DI PAPADOPOLI the enemy, attacked with extreme violence by the 14th British Army Corps and by the Italian Army Corps of the 10th Army, has given ground. Our troops, having broken through the enemy's lines and liberated the villages of BORGO MALANOTTE, TEZZE, RAI, S. MICHELE di PIAVE, CIMADOLMO, S. POLO di PIAVE, and ORMELLE, have entered S. LUCIA di PIAVE and VAZZOLA and are about to reach the MONTICANO. The capture of prisoners and guns not yet counted is announced.

ALBANIA. Our troops, closely pressing the enemy's rear-guards, on the morning of the 27th instant entered ALESSIO and are marching on S. GIOVANNI di MEDUA.

#### GERMAN.

(October 29, 1918, 12.19 p. m.) WESTERN FRONT. Army Group of Crown Prince Rupprecht. Hostile local attacks near OLSENE, in the low ground along the Lys, were repulsed. Strong hostile detachments which attempted to cross to the eastern bank of the SCHELDT N. W. of CONDÉ were thrown back by counter-attack. Strong hostile attacks S. of the SCHELDT near FAMARS succeeded in temporarily penetrating our lines. The 176th Infantry Regiment, commanded by Captain Preusser, completely repulsed the enemy. The 7th Battery, 71st Field Artillery Regiment, and the 38th Battery of Infantry guns contributed materially to the success. E. of ARTRES local hostile attacks were repulsed. The enemy is continuing the destruction of villages in and E. of the SCHELDT Valley. VALENCIENNES also was under heavy hostile fire.

Army Group of the German Crown Prince. French attacks on the OISE Canal between ETRÉUX and LES QUIELLES were broken up by our concentrated artillery fire. Small detachments which advanced across the canal were thrown back by counter-attack. W. of GUISE hostile attacks were prevented from developing by our fire. In the SOUCHE sector on both sides of the LAON-MARLE road strong hostile attacks early in the morning were repulsed by Posen and West Prussian regiments.

Army Group of von Gallwitz. Between the AIRE and the MEUSE artillery activity increased intermittently.

AVIATION. During the last two days we have shot down 49 hostile airplanes and three captive balloons.

(October 29, 1918, 7.35 p. m.) Local engagements occurred S. of the Lys and S. of LE QUESNOY. Between NIZY-LE-COMTE and the AISNE very heavy French attacks were repulsed during the afternoon.

#### TURKISH.

(October 29, 1918, 7.10 p. m.) Nothing of importance occurred on the fronts.

# SUMMARY OF AIR INFORMATION

## CHANGES IN LOCATION OF UNITS

Nil.

### IDENTIFICATIONS

#### ARGONNE-MOSELLE REGION.

1st Pursuit Squadron (Richthofen) Marville ..... October 28..... Prisoner's statement, American source.  
(4th, 6th, 10th, and 11th Flights)  
Last identified at Joppecourt (same region), October 10, 1918. (See below.)  
2d Pursuit Squadron ..... Stenay ..... October 28..... Prisoner's statement, American source.  
(12th, 13th, 15th and 19th Flights)  
Last identified at Marville (same region), October 18, 1918. (See below.)

### AIRDROMES

Nil.

## ENEMY AIR ORDER OF BATTLE—ARGONNE TO SWISS BORDER, OCTOBER 30, 1918

### ARGONNE-MOSELLE REGION

#### *Pursuit Flights:*

\*4th—Marville (Airdrome No. 30).  
\*6th—Marville (Airdrome No. 30).  
\*10th—Marville (Airdrome No. 30).  
\*11th—Marville (Airdrome No. 30).  
\*12th—Stenay (Airdrome No. 57).  
\*13th—Stenay (Airdrome No. 57).  
\*15th—Stenay (Airdrome No. 57).  
18th—Bruville area (probably Conflans Airdrome No. 72).  
\*19th—Stenay (Airdrome No. 57).  
64th—Mars-la-Tour (before the advance).  
65th—Mars-la-Tour (before the advance).  
67th—Marville (Airdrome No. 30).

#### *Bombing Flights:*

28th (?)—Cosnes (Airdrome No. 19).  
29th (?)—Cosnes (Airdrome No. 19).  
30th (?)—Cosnes (Airdrome No. 19).

#### *Battle Flights:*

2d—Autrecourt (Airdrome No. 103).  
5th—Virton (Airdrome No. 67).  
20th—Virton (Airdrome No. 67).  
21st—Virton (Airdrome No. 67).  
32d—Unlocated.  
33d—Virton (Airdrome No. 67).  
37th—Thonne-les-Pres (Airdrome No. 54).  
45th—Unlocated.

### MOSELLE-VOSGES REGION.

#### *Pursuit Flights:*

28th—Metz area.  
63d—Metz area.  
78th—Buhl (Airdrome No. 6).  
80th—Marimont (Airdrome No. 47).  
84th—Frescaty (Airdrome No. 7).

#### *Reconnaissance Flights:*

12th—Many (Airdrome No. 11).  
67th—Lorquin (Airdrome No. 12).  
100th—Morhange (Airdrome No. 8).  
199th—Bensdorf (Airdrome No. 45).  
218th—Unlocated.  
242d—Frescaty (Airdrome No. 7).  
257th—Morhange (Airdrome No. 8).  
275th—Metz area.  
281st—Lorquin (Airdrome No. 12).

#### *Reconnaissance Flights:*

29th—West of Briey (probably Briey Airdrome No. 16).  
31st—Ozerailles (Airdrome No. 32).  
36th—Jametz S. (Airdrome No. 76 S.).  
37th—Doncourt (Airdrome No. 72).  
44th—Unlocated.  
46th—Briey (Airdrome No. 58).  
47th—Unlocated.  
203d—Jametz N. (Airdrome No. 76 N.).  
206th—Unlocated.  
215th—Probably at Buzancy (Airdrome No. 400).  
219th—Jametz S. (Airdrome No. 76 S.).  
232d—Ozerailles (Airdrome No. 32).  
246th—Briey (Airdrome No. 58).  
274th—Stenay (Airdrome No. 57).  
279th—Ozerailles (Airdrome No. 32).  
280th—Longuyon (Airdrome No. 56).  
296th—Conflans area.  
298th—Buxieres (before the advance).

#### *Bombing Flights:*

25th—Boulay (Airdrome No. 61).  
26th—Boulay (Airdrome No. 61).  
27th—Boulay (Airdrome No. 61).

#### *Battle Flights:*

None.

#### *Home Defense Flights:*

1st—Bitche (Airdrome No. 107).  
2d—Folpersweiler (Airdrome No. 60).  
3d—Morhange (Airdrome No. 8).  
8th—Bitche (Airdrome No. 107).

### VOSGES-SWITZERLAND REGION.

#### *Pursuit Flights:*

69th—Habsheim (Airdrome No. 26).  
70th—Stotzheim (Airdrome No. 89).  
71st—Habsheim (Airdrome No. 26).  
75th—Habsheim (Airdrome No. 26).  
76th—Habsheim (Airdrome No. 26).

#### *Home Defense Flights:*

4-B—Fribourg (Airdrome No. 2).  
5th—Neuf-Brisach (Airdrome No. 23).  
6th—Neuf-Brisach (Airdrome No. 23).  
14th—Lahr (Airdrome No. 41).  
(?)—Karlsruhe (Airdrome No. 65).

#### *Bombing Flights:*

None.

#### *Reconnaissance Flights:*

4th—Hagenau (Airdrome No. 55).  
10th—Schlestadt (Airdrome No. 4).  
43d—Schlestadt (Airdrome No. 4).  
243d—Colmar (Airdrome No. 28).  
267th—Habsheim (Airdrome No. 26).  
282d—Sierenz (Airdrome No. 27).  
289th—Habsheim (Airdrome No. 26).

#### *Mosaic Sections:*

4th—Altdorf (Airdrome No. 88).

#### *Battle Flights:*

None.

\*Flights in which change in locations has occurred.

**ACTIVITY****OUR OWN FORCES :**

Argonne to Meuse.—No night reconnaissance missions. Observation squadrons very active, successfully performing their missions, although attacked. Numerous reconnaissance and reglage missions executed. Photographic missions in area of the Meuse and in the region of Etain, Conflans, and Mars-la-Tour. Two hundred and forty-seven pictures taken. Visual reconnaissances in area of Grandpre, Vouziers, Le Chesne, Buzancy, Stenay, Dun-sur-Meuse, Damvillers, Etain, and Mouaville. Our bombing planes raided Nouart, Barricourt, Bayonville, and Belleville-sur-Bar. Five and one-half tons of bombs were dropped. Pursuit planes very active. Twenty-one enemy planes were shot down. Two of our planes are missing.

Meuse to Moselle.—Three pursuit patrols, sixteen reconnaissances, and two photographic reconnaissances.

**ENEMY'S FORCES :**

Argonne to Meuse.—Visibility fair. Slight ground mist. Pursuit planes very aggressive, attacking both photographic and bombing planes. Reconnaissance active. Reglage planes reported along our entire front. Considerable bombing activity during the night, Montfaucon being bombed, as well as roads and woods in rear areas. Six balloons in ascension.

General impression—very active.

Meuse to Moselle.—Visibility poor to fair. Pursuit planes active all day, especially around noon in region of La Chaussee. Large formations patrolled the lines and frequently attacked our reconnaissance machines. One hundred and twenty-three planes reported. All lines under reconnaissance during the day, such activity being particularly strong on left of sector. Eight deep reconnaissances made, as well as two between La Chaussee and the Moselle and two east of the Moselle. Thirty-three planes reported. In artillery adjustment 33 flights ranged 44 batteries, obtaining 24 brackets. No bombing carried out by the enemy during this period. Six balloons in ascension.

General impression—very active.

**DISTRIBUTION OF IDENTIFIED GERMAN AIR UNITS, OCTOBER 30, 1918**

Region.	Pursuit.		Reconnaissance.		Battle.		Bombing.	
	Oct. 28.	Oct. 29.	Oct. 28.	Oct. 29.	Oct. 28.	Oct. 29.	Oct. 28.	Oct. 29.
Flanders.....	9	9	7	7	2	2	6	6
Lys-Vimy.....	7	7	19	19	3	3	6	6
Vimy-Noyon.....	23	23	38	37	12	12	9	9
Noyon-Argonne.....	21	21	45	46	16	16	3	3
Argonne-Moselle.....	12	12	18	18	8	8	3	3
Moselle-Vosges.....	5	5	9	9	..	..	3	3
Vosges-Switzerland.....	5	5	7	7	..	..	..	..
Exterior Fronts.....	2	2	20	20	..	..	..	..
Unlocated.....	1	1	1	1	1	1	..	..
Total.....	85	85	164	164	42	42	30	30

Total identified flights (all classes) on all fronts. October 29—348.

Total estimated machines belonging to such flights—3,006.

**COMBING IN THE GERMAN AIR SERVICE**

FROM R. A. F. SUMMARY OF AIR INTELLIGENCE, OCTOBER 24, 1918

The following is extracted from the letter of a man in the 9th Battle Flight, written on September 15, 1918:

"You will see that I am still in the air service, but my position seems to be a bit shaky ; it is said that we are to be (combed) and transferred to the infantry. . . . Well, I'm hoping for good luck."

HEADQUARTERS SECOND ARMY, AMERICAN EXPEDITIONARY FORCES, SECOND SECTION (G 2, 9)  
OCTOBER 26, 1918.

**REPORT ON ARTILLERY ADJUSTMENT BY GERMAN AIRPLANES**

FROM INFORMATION GIVEN BY A GERMAN AVIATION PRISONER RECENTLY CAPTURED BY AMERICANS.

German reconnaissance planes do all kinds of work, including patrolling for the infantry and adjusting for the artillery. The "Jagstaffeln," who specialize in combat, are the only specialists among the German fliers.

Before a plane goes out to adjust for artillery it flies around its home station and tests out its wireless. It then calls its "Gefechts-antenna", the station which relays its signals to the battery for which it is adjusting. This station may be near or far from the battery. In Detachment "C" they are generally quite far away.

Most of the planes are equipped with wireless apparatus for receiving and sending (*wechselverkehr*). It is very difficult to receive signals on account of the noise, and very few of the observers attempt to do any receiving.

Call signs of airplanes change every week, according to the prisoner's statement. About ten calls are assigned to each flight. He did not know how often the call signs of fighting stations (*gefechts-antenna*) changed.

Besides the fighting station there are "Überwachungs batterie" stations (stations of batteries in readiness to engage fleeting targets). There is only one of these in the sector of the 35th Austro-Hungarian Division, for the artillery of which the prisoner worked.

Arrangements as to wave lengths to be used are made between the airplane and the fighting station. Prisoner stated that he generally used a 250-m. wave length.

Most of the adjusting is done behind the German lines, or from a very high altitude. Only the younger and less experienced pilots cross the lines.

If an artillery adjustment plane is attacked and wants assistance, it sends the signal "K. U. K.", which means "come and fight" (*Kommen and Kampfen*).

The prisoner did not know much about the German Airplane Wireless Warning Service. He said, however, that if our reglage signals indicated that our batteries were firing on magazines which might explode and kill a lot of people, a general warning was sent out. He also said that our airplanes were in the habit of sending a great many messages in clear.

On being asked the reason for the large amount of adjustment activity of October 22, the prisoner said the commander of Detachment "C" expected an attack. Prisoner said the Saint-Mihiel attack was somewhat of a surprise and that they did not wish to be caught napping again.

#### 1ST AND 2D PURSUIT SQUADRONS

A prisoner of the 19th Pursuit Flight states that the 2d Pursuit Squadron is located at Stenay, and that it moved to this airdrome from the Metz area. He also states that the 1st Pursuit Squadron (Richthofen Squadron) is located at Marville, instead of the 2d Squadron, which was recently reported there. The 1st Squadron was reported at Joppécourt on October 10, but it is believed that this was incorrect, as the airdrome at Joppécourt is not large enough to accommodate the entire squadron, while the airdrome at Marville is.

The prisoner appears reliable and a number of his statements have been verified. It would therefore appear that the above information may be considered accurate.

#### SUMMARY OF OFFICIAL COMMUNIQUES

OCTOBER 30, 1918.

##### AMERICAN.

(October 30, 1918, morning.) N. of VERDUN our troops have occupied AINCREVILLE, and have established their lines just N. of the village. Lively artillery fighting occurred during the night at various points along the front. In the WOEVRE our patrols successfully engaged hostile detachments and captured prisoners.

(October 30, 1918, evening.) On the VERDUN front the day was marked by heavy artillery fire E. of the MEUSE. An enemy raid on our lines E. of BEAUMONT was repulsed.

In the WOEVRE our patrols were again active and brought in prisoners.

Our pursuit squadrons operating on the front of the First Army shot down 21 enemy airplanes and two observation balloons. Two of our machines are missing.

##### FRENCH.

(October 30, 1918, 11 a. m.) N. of GUISE our troops advanced on the N. bank of the OISE and took the BEAUFORT Farm, W. of LESQUIELLES. On the right of the PERON we made a new advance to the E. of MONCEAU-le-NEUF, taking some prisoners.

In LORRAINE two hostile raids were unsuccessful. The night was quiet on the rest of the front.

(October 30, 1918, 9 p. m.) In the course of local operations S. of GUISE we succeeded in capturing several hostile trenches and in advancing toward the GUISE-Le HERIE-la-VIEVILLE road.

Our troops continued their offensive between BANOGNE and HERPY and took prisoners. W. of ST. FERGNEUX, near HILL 145, very lively fighting is in progress, in which our troops have repulsed several hostile counter-attacks. There is nothing to report from other parts of the front.

AVIATION. The very fine weather on October 29 allowed our air service to operate to the fullest extent. The observation air service covered the enemy's front with its reconnaissances, a large number of which advanced to a depth of more than 30 kilometers within the enemy's lines and some as far as 80 kilometers. One of them penetrated the German zone to a distance of 120 kilometers. Useful information and 1,350 photographs were brought back from these reconnaissances. The bombing air service, in continuation of its activity during the previous days, dropped more than 37 tons of explosives and fired 20,000 rounds on hostile concentrations and convoys in the region of REMAUCOURT, SON, and SERAINCOURT. This fire, carried out from a low altitude, had excellent results. During these operations and flights by battle planes 20 hostile machines were shot down or fell disabled and three captive balloons were set on fire.

During the night, in spite of unfavorable weather, our bombing aviators attacked the enemy's most active railway stations and 18 tons of projectiles were dropped, with very good results, on the junctions of GIVET, MEZIERES, HIRSON, VERVINS, MONTCORNET, and LAUNOIS, and on the dumps and camps in the regions of PROVISY and MONTCORNET.

First Sergeant Pezon set a hostile balloon on fire yesterday, this being the tenth machine brought down by this pilot, making nine balloons and one airplane in all.

##### BRITISH.

(October 30, 1918, 9.50 a. m.) Aside from patrol encounters, during which we advanced and took some prisoners there is nothing to report.

##### ITALIAN.

(October 30, 1918, 3.51 p. m.) The enemy, attacked frontally with great energy by the troops of the 8th and 12th Armies and threatened on the flank by the decided advance of the 10th Army, has been forced to abandon his positions on the heights of the left bank of the River PIAVE. Vigorously pressed by our troops, he is retreating and making successive attempts to stand his ground, wherever he can cut the roads.

VALDOBBIADENE, S. PIETRO di BARBOZZA, FARRA di SOLIGO, PIEVE di SOLIGO, COLLALTO, REFRONTOLO, MARENCO di PIAVE, and FONTANELLA have been liberated.

Our parties, closely following up the enemy, who blew up the bridge over the MONTICANO, entered CONEGLIANO in the morning.

To the N., on the right of the PIAVE, other troops operating in accord with those on the left bank, passed, after a lively and brilliant struggle, beyond the CALCINO Torrent. Bitter fighting is taking place in the region of the GRAFFA.

The capture of further thousands of prisoners is announced. The number of guns ascertained is more than 150, including many of medium and heavy caliber. A good part are already in action against the enemy.

##### BELGIAN.

(October 30, 1918.) There was considerable artillery activity on the whole front during the night. The day was quiet.

##### FRENCH.

(October 29, 1918.) Army of the Orient. The Serbian cavalry reached the Danube, E. of SEMENDRIA, and occupied POZAREVAC. The enemy is retreating precipitately before the Serbian Armies, who have reached the line GORNJI-MILANOVAC-TOPOLA-PALANKA, 60 kilometers S. of BELGRADE, taking additional prisoners and war materiel.

# SUMMARY OF AIR INFORMATION

## CHANGE IN LOCATIONS OF UNITS

Nil

## IDENTIFICATIONS

Nil

## AIRDROMES

Nil

## ACTIVITY

### OUR OWN FORCES.

*Argonne to the Meuse.*—No night reconnaissance. Pursuit planes, in addition to patrols, operated protective fights ; also a special mission attacked the Bois de Barricourt, Bois de Folie, the Nouart-Buzancy road, and the region of Villers and Clary-la-Grande, dropping bombs and machine-gunning troops. Six visual reconnaissances operated over the area of Grandpre, Buzancy, Mouzon, Stenay, Montmedy, Longuyon, Conflans, Spincourt and Damvillers. Nine photographic reconnaissances operated over the area east of the Meuse and between Conflans and Spincourt, taking 285 photographs. Two and a half tons of bombs were dropped on Taily and Barricourt. French squadrons dropped 12 tons of bombs on Mezieres, Poix-Terron, and railways in that region. Seven enemy planes were brought down ; none of ours missing.

*The Meuse to the Moselle.*—Two patrols, 11 reconnaissances, and two photographic reconnaissances.

### ENEMY'S FORCES :

*Argonne to the Meuse.*—Visibility fair ; some ground haze. Pursuit planes active, but less aggressive. Reglage and reconnaissance planes showed some activity on the left and right of sector. Septsarges, Montfaucon, and Autfremont were bombed, as well as the regions of the Bois de Dannevaux, Bois de Cunel, Cierges, and Nantillois. Propaganda dropped at several points. Few balloons in ascension.

General Impression.—Active.

*The Meuse to the Moselle.*—Visibility impossible to good. One hundred and thirty pursuit plane-reported ; 23 reconnaissances ; 13 adjustments with 12 brackets and obtaining three hits ; ten deep reconssances ; no planes brought down ; six balloon ascensions.

General Impression.—Active.

## DISTRIBUTION OF IDENTIFIED GERMAN AIR UNITS, OCTOBER 31, 1918

(Same as reported in SUMMARY OF AIR INFORMATION, No. 91 October 31, 1918.)

## ENEMY AIR ORDER OF BATTLE—ARGONNE TO SWISS BORDER, OCTOBER 31, 1918

(Same as reported in SUMMARY OF AIR INFORMATION, No. 91, October 31, 1918.)

## INTERROGATION OF A PILOT (OFFICER) OF THE 19TH JAGDSTAFFEL, (CAPTURED OCTOBER 26th NORTH OF EXERMONT)

(The prisoner giving the following information is the same whose identification of units was established October 31).

### SUPPLY :

The prisoner asserts that there is no shortage of planes in Germany. He states that the 19th Pursuit Flight, as well as all the other flights of the 2d Pursuit Squadron, are equipped with 14 machines, all Fokker D. 7. He claims, moreover, that the 19th Pursuit Flight has five spare machines.

According to the prisoner, the Richthofen Squadron has recently received Fokker D.7 machines equipped with 200 h.p. B. M. W. (Bayerische Motor Werke) engines, instead of the 160 h.p. Mercedes.

The prisoner also states that the Siemens factory has constructed a new single-seater (*Kampfeinsitzer*) with a 230 HP rotary motor. The width of the wings is normal. The motor is said to make 800 revolutions per minute. (This should be taken with reserve.)

According to the prisoner, the 2d Pursuit Squadron was to receive some of the new Fokker machines above mentioned in a few days.

### MARKINGS :

The prisoner states that the planes flown by the 19th Pursuit Flight are painted with a yellow nose and blue fuselage ; that those of the 12th Pursuit Flight are black and yellow, those of the 13th Pursuit Flight red and green, and those of the 15th Pursuit Flight white and red. The colorings are ordered by the flight commander and are changed at frequent intervals. In addition, each pilot carries some distinctive mark on his own machine.

Comparing the German planes with those of the Allies, the prisoner states that he considers the Fokker superior to either the Spad or Sopwith. He gives it as his opinion that the planes mentioned are too light, and asserts that the Fokker excels in construction and quality of material. He states also that the Fokker is easier to maneuver. The prisoner claims to have flown both Spad and Sopwith planes.

The prisoner does not agree with the statements of other German pilots to the effect that the Rumpler plane is undesirable because of its tendency to "nose-spinning". He thinks that experienced pilots should have no difficulty in maneuvering it.

He corroborates the statements of other prisoners to the effect that the armored Junker machine is too heavy and unwieldy for efficiency.

**PARACHUTE :**

The prisoner states that all pursuit machines are now equipped with parachutes. The reconnaissance flights have not yet all received parachutes. In the latter connection, the prisoner states he has heard that it is not the intention to equip observers with parachutes, because it would create a tendency to jump at the least danger.

**TRANSPORTATION :**

The prisoner states that the 2d Pursuit Squadron is amply provided with motor transportation for all of the flights. The 19th Pursuit Flight has had no difficulty in obtaining from the squadron whatever trucks are needed.

**TACTICS :**

The 19th Pursuit Flight flies in wedge formation, the last machine flying several hundred meters higher than the rest until attacked, when it drops to the level of the squadron.

**COMMAND :**

The prisoner states that in the Army Group von der Marwitz there are, in addition to the 1st and 2d Pursuit Squadrons, four pursuit flights (numbers not given), which are grouped by twos. These are called Gruppen Jagdstaffeln (Gruja). These groups work independently of the squadrons, according to the prisoner's statement, and are under the army command.

The 1st and 2d Pursuit Squadrons are directly under command of General Headquarters, and are used only on fronts which it is considered important to hold.

The prisoner corroborates the report that Lieut. Freiherr von Beaulieu, until recently commander of the 19th Pursuit Flight, was shot down by a German plane, and subsequently died of wounds received.

**SUMMARY OF OFFICIAL COMMUNIQUE**

OCTOBER 31, 1918.

**AMERICAN.**

(October 31, 1918, morning.) On the VERDUN front there was heavy artillery and machine-gun fire during the night on both sides of the MEUSE. N. of GRANDPRE our troops advanced their lines and occupied the BELLEJOYEUSE Farm.

Yesterday our bombing units attached to the First and Second Armies carried out a number of successful raids, dropping six tons of explosives on BARRICOURT, BAYONVILLE, and LONGUYON.

(October 31, 1918, evening.) N. of VERDUN our troops drove the enemy from the village of BRIEULLES, on the W. bank of the MEUSE. Artillery fighting continued lively on the whole front throughout the day, reaching particular intensity between AINCREVILLE and the Bois de BANTHEVILLE.

Last night French bombing units attached to the 1st Army successfully raided MEZIERES and POIX-TERRON and dropped nearly 12 tons of explosives on the important railways in that region. This morning our aviators dropped three tons of bombs on the roads and dumps in the vicinity of TAILLY, BARRICOURT, and VILLERS-devant-DUN, and machine-gunned enemy troops and convoys. In the course of the day seven enemy airplanes were shot down. All our machines returned.

SUMMARY OF AIR INFORMATION

CHANGE IN LOCATION OF UNITS

VIMY-NOYON REGION.

57th Pursuit Flight ..... Valenciennes front .... October 27 ..... Machine shot down,  
R. A. F.  
Last identified in Noyon-Argonne region, August 10, 1918.  
58th Pursuit Flight ..... Cantin area ..... September 6..... Document, R. A. F.  
Last identified in Noyon-Argonne region, July 15, 1918.

ARGONNE-MOSELLE REGION.

273d Reconnaissance Flight..... Longwy area..... October 31 ..... Prisoner's statement  
Last identified in Vimy-Noyon region, June 13, 1918. American source.

INTERIOR.

6th Home Defense Flight..... Mainz..... September, 1918..... Prisoner's statement,  
Last identified at Neuf-Brisach (Vosges-Switzerland region), July, 1918. R. A. F.  
9th Home Defense Flight..... Sandhofen..... September, 1918..... Prisoner's statement,  
Last identified at Mainz (Interior), March 14, 1918. R. A. F.  
This is probably the Home Defense Flight recently identified at Sandhofen and Mannheim, the number of which was  
unknown. It is believed that this flight is divided into two sections, one section being located at Sandhofen and the other  
at Mannheim.

IDENTIFICATIONS

Nil.

AIRDROMES

ARGONNE-MOSELLE REGION.

	Change in Accommodation.		Present Accommodation.
	Hangars. Sheds. Capacity.		Hangars. Sheds. Capacity.
1. Photographs of the following airdromes show no change			
81. Constantine Farm .....	.. ..	4	2 20
British photo, October 29, 1918. It appears that several of the structures are being used as ware-houses, but there is no indication of occupancy by air units.			
56. Longuyon .....	.. ..	13	.. 25
U. S. photo, October 29, 1918.			
76. Jametz.....	.. ..	10	4 32
British photo, October 29, 1918.			

NOTE.—A photograph taken of the old Landreville airdrome shows that the hangars had not been removed October 29, 1918, but it cannot be used as an airdrome, as it is only two kilometers from the line.

MOSELLE-VOSGES REGION.

1. Photograph of the following airdromes shows no change.  
6. Buhl ..... 38 6 113  
British photo, October 29, 1918.

VOSGES-SWITZERLAND REGION.

1. Change in existing airdrome.  
24. Rustenhardt ..... +2 ..... +4 14 3 40  
Increase since July 14, 1918. French photo, October 28, 1918.

ENEMY AIR ORDER OF BATTLE—ARGONNE TO SWISS BORDER, NOVEMBER 1, 1918

ARGONNE-MOSELLE REGION.

Pursuit Flights:	Reconnaissance Flights:
4th—Marville (Airdrome No. 30).	29th—West of Briey (probably Briey Airdrome No. 16).
6th—Marville (Airdrome No. 30).	31st—Ozerailles (Airdrome No. 32).
10th—Marville (Airdrome No. 30).	36th—Jametz S. (Airdrome No. 76 S.).
11th—Marville (Airdrome No. 30).	37th—Doncourt (Airdrome No. 72).
12th—Stenay Airdrome No. 57).	44th—Unlocated.
13th—Stenay (Airdrome No. 57).	46th—Briey (Airdrome No. 58).
15th—Stenay (Airdrome No. 57).	47th—Unlocated.
18th—Bruvile area (probably Conflans Airdrome No. 72).	203d—Jametz N. (Airdrome No. 76 N.).
19th—Stenay (Airdrome No. 57).	206th—Unlocated.
64th—Mars-la-Tour (before the advance).	215th—Probably at Buzancy (Airdrome No. 400).
65th—Mars-la-Tour (before the advance).	219th—Jametz S. (Airdrome No. 76 S.).
67th—Marville (Airdrome No. 30).	232d—Ozerailles (Airdrome No. 32).
	246th—Briey (Airdrome No. 58).
	273d—Longwy area.
	274th—Stenay (Airdrome No. 57).
	279th—Ozerailles (Airdrome No. 32).
	280th—Longuyon (Airdrome No. 56).
	296th—Conflans area.
	298th—Buxieres (before the advance).

Bombing Flights:

28th(?)—Cosnes (Airdrome No. 19).  
29th(?)—Cosnes (Airdrome No. 19).  
30th(?)—Cosnes (Airdrome No. 19).

Battle Flights:

2d—Autrecourt( Airdrome No. 103).  
5th—Virton (Airdrome No. 67).  
20th—Virton (Airdrome No. 67).  
21st—Virton (Airdrome No. 67).  
32d—Unlocated.  
33d—Virton (Airdrome No. 67).  
37th—Thomme-les-Pres (Airdrome No. 54).  
45th—Unlocated.

Mosaic Sctions:

Army Detachment C—Briey (Airdrome No. 16).

## MOSELLE-VOSGES REGION.

*Pursuit Flights:*

28th—Metz area.  
63d—Metz area.  
78th—Bull (Airdrome No. 6).  
80th—Marionville (Airdrome No. 47).  
84th—Frescaty (Airdrome No. 7).

*Reconnaissance Flights:*

12th—Many (Airdrome No. 11).  
67th—Lorquin (Airdrome No. 12).  
100th—Morhange (Airdrome No. 8).  
199th—Bensdorf (Airdrome No. 45).  
218th—Unlocated.  
242d—Frescaty (Airdrome No. 7).  
257th—Morhange (Airdrome No. 8).  
275th—Metz area.  
281st—Lorquin (Airdrome No. 12).

*Bombing Flights:*

25th—Boulay (Airdrome No. 61).  
26th—Boulay (Airdrome No. 61).  
27th—Boulay (Airdrome No. 61).

*Battle Flights:*

None.

*Home Defense Flights:*

1st—Bitche (Airdrome No. 107).  
2d—Folpersweiler (Airdrome No. 60).  
3d—Morhange (Airdrome No. 8).  
8th—Bitche (Airdrome No. 107).

## VOSGES-SWITZERLAND REGION.

*Pursuit Flights:*

69th—Habsheim (Airdrome No. 26).  
70th—Stotzheim (Airdrome No. 89).  
71st—Habsheim (Airdrome No. 26).  
75th—Habsheim (Airdrome No. 26).  
76th—Habsheim (Airdrome No. 26).

*Home Defense Flights:*

4-B—Fribourg (Airdrome No. 2).  
5th—Neuf-Brisach (Airdrome No. 23).  
14th—Lahr (Airdrome No. 41).  
(?)—Karlsruhe (Airdrome No. 65).

*Reconnaissance Flights:*

4th—Hagenau (Airdrome No. 55).  
10th—Schlestadt (Airdrome No. 4).  
43d—Schlestadt (Airdrome No. 4).  
243d—Colmar (Airdrome No. 28).  
267th—Habsheim (Airdrome No. 26).  
282d—Sierentz (Airdrome No. 27).  
289th—Habsheim (Airdrome No. 26).

*Mosaic Sections:*

4th—Altdorf (Airdrome No. 88).

*Battle Flights:*

None.

*Bombing Flights:*

None.

\*Flights in which change in locations has occurred.

## ACTIVITY

## OUR OWN FORCES.

*Argonne to the Moselle.*—Pursuit planes carried out several patrols. Corps observation planes active in locating front lines and maintaining liaison. Visual reconnaissance carried out over Grandpre, Buzancy, Dun-sur-Meuse, Longuyon, Montmedy, and Stenay. Photographic missions carried out over Buzancy, Brioules-sur-Bar, and Grandpre. Twenty photographs were taken. French squadrons attached to our forces carried out night reconnaissances over Etain, Spincourt, Longuyon, Montmedy, Margut, and Stenay and also dropped bombs on the stations at Longuyon and Dommery-Baroncourt. One enemy plane brought down.

*The Meuse to the Moselle.*—Nil.

## ENEMY'S FORCES.

*Argonne to the Moselle.*—Visibility bad to impossible. Hostile airplanes encountered over Buzancy and two patrols observed on the left of the sector.

General Impression.—Very inactive.

*The Meuse to the Moselle.*—Visibility impossible. One group of five pursuit planes observed over our lines.

General Impression.—Activity very slight.

## ARGONNE TO THE MEUSE.

*Aviation.*—Visibility bad to impossible. Hostile airplanes encountered over Buzancy and two patrols observed on the left of the sector.

## THE MEUSE TO THE MOSELLE.

*Aviation.*—Visibility impossible. One group of five pursuit planes observed over our lines.

## GERMAN PLANES

FOKKER D 6.—A captured aviator states that this machine is somewhat similar to the Sopwith Camel, is equipped with a Siemens Schuckert Rotary motor, and gives entire satisfaction as a pursuit plane.

(NOTE.—This plane has been previously reported as being fitted with an Oberursel rotary motor, but engine trouble was experienced owing to the unsatisfactory quality of the oil available.)

A. E. G. J1.—This is reported by a captured pilot as being the best of the armored infantry planes. It requires a very large aviation field, as it cannot take off under 3 (?) kilometers. (From interrogation No. 200 by the 1st Army.)

(NOTE.—Particulars of this plane were given in SUMMARY OF AIR INFORMATION, No. 47, September 17, 1918.)

FOKKER TRIPLANE D8.—A report has been received that experiments were carried out at the Fokker Works with a triplane having the following characteristics:

*Span.*—21 1/4 ft. *Length.*—19 ft. 11 in.

*Engine.*—160-hp. Mercedes or Benz.



*Speed Level.*—112 m. p. h.

Ailerons are fitted to the top plane only. There are no interplane struts, but flying and landing wires are fitted.

From the dimensions, this airplane would appear to be a modification of the Fokker Dr. 1 to take a stationary engine. (From British S. of T. A. I., October 24, 1918.)

**EQUIPMENT OF HALBERSTADT SQUADRONS.**—A prisoner recently captured states that in squadrons equipped with Halberstadt CL2 airplanes the flight leader's machine is fitted with two synchronized machine guns for the pilot and a third for the observer. The other machines of the formation have only one synchronized gun for the pilot and the usual gun for the observer. (From British S. of T. A. I., October 24, 1918.)

#### DISTRIBUTION OF IDENTIFIED GERMAN AIR UNITS, NOVEMBER 1, 1918

Region.	Pursuit.		Reconnaissance.		Battle.		Bombing.	
	Oct. 31	Nov. 1	Oct. 31	Nov. 1	Oct. 31	Nov. 1	Oct. 31	Nov. 1.
Flanders .....	9	9	7	7	2	2	6	6
Lys-Vimy .....	7	7	19	19	3	3	6	6
Vimy-Noyon.....	23	25	37	36	12	12	9	9
Noyon-Argonne.....	21	19	46	46	16	16	3	3
Argonne-Moselle.....	12	12	18	19	8	8	3	3
Moselle-Vosges .....	5	5	9	9	..	..	3	3
Vosges-Switzerland.....	5	5	7	7	..	..	..	..
Exterior Fronts .....	2	2	20	20	..	..	..	..
Unlocated .....	1	1	1	1	1	1	..	..
Total .....	85	85	164	164	42	42	30	30

Total identified flights (all classes) on all fronts, November 1—347.

Total estimated machines belonging to such flights—2,992.

#### CAPTURED GERMAN AIRCRAFT

FROM BRITISH SUMMARY OF TECHNICAL AIR INTELLIGENCE, OCTOBER 29, 1918

**JUNKER TWO-SEATER TYPE J.1.**—A machine of this type was salvaged during the recent operations. It is constructed throughout of metal; all the main spars, longerons, and internal bracing are of aluminum alloy tubing, and the covering of the wings is of corrugated sheet aluminum.

The engine, which is a 220-hp. Benz, and forepart of the fuselage to the observer's cockpit, are completely protected by 5-mm. armor plating.

The machine is camouflaged in patches of green and purple.

The petrol tank, which forms the pilot's seat, has a capacity of 77 gallons, and the oil tank, which is just in front of the instrument board, has a capacity of 10 gallons.

No guns were salvaged with this machine.

**MACHINE No. 181.**—Date of construction, May 8, 1918.

Weight, according to figures on the fuselage:

Weight empty .....	3,724 lbs.
Useful load .....	845 lbs.
Total weight .....	4,569 lbs.

The weight of one lower plane is 70 lbs., as compared with 45 lbs. in the R. E. 8. (The total weight of the R. E. 8 is 2,869 lbs.)

Dimensions:

Total span of top plane.....	51 ft.	0 in.
Total span of bottom plane.....	35 ft.	7 in.
Span of ailerons (each).....	18 ft.	2 in.
Chord of ailerons .....	1 ft.	8 1/2 in.

#### SUMMARY OF OFFICIAL COMMUNIQUE

NOVEMBER 1, 1918

##### AMERICAN.

(NOVEMBER 1, 1918, morning.) On the VERDUN front the night was marked by artillery fire on both sides of the MEUSE.

From the other sectors held by our troops there is nothing of importance to report.

(November 1, 1918, evening.) The 1st American Army continued its attack on the W. bank of the MEUSE in conjunction with the 4th French Army on its left.

The perfect co-operation of all arms—infantry, artillery, airplanes, and tanks—succeeded in overcoming and disorganizing the enemy's determined resistance and in breaking up his counter-attacks. Enemy divisions, rapidly brought up, were intermingled with units already in line in a vain attempt to stop our advance.

Our victorious troops have already taken and passed beyond ST. GEORGES, LANDRES-ET-ST. GEORGES, IMECOURT, LANDREVILLE, CHENNEVY, BAYONVILLE, REMONVILLE, ANDEVANNE, and CLERY-LE-GRAND.

Up to the present 3,602 prisoners have been counted, of whom 151 are officers.

##### FRENCH.

(November 1, 1918, morning.) Violent artillery action occurred during the night in the region of GUISE and W. of ST. FERGEUX.

There is nothing to report from the rest of the front.

##### BRITISH.

(November 1, 1918, morning.) During minor operations yesterday by some of our detachments near Le QUESNOY we took a number of prisoners.

This morning we undertook an operation S. of VALENCIENNES, which is reported to be developing favorably.

ITALIAN.

(November 1, 1918, 4 p. m.) The battle is continuing and expanding. The enemy, maintaining intact his resistance from the STELVIO to the ASTICO, is vacillating on the ASIAGO Plateau and is in full retreat on the remainder of the front, protected more by the interruptions on the roads than by rear-guards, irresistibly overwhelmed by our troops, who are carried on in pursuit by their enthusiasm. Our batteries brought quickly forward and captured artillery are intensely shelling the adversary, exploiting the whole length of their range.

The cavalry divisions, having destroyed the enemy's resistance on the LIVENZA and re-established the crossings, are marching toward the TAGLIAMENTO.

The Ancona Brigade, 69th and 70th Regiments, at the end of the BRENTA Valley, has this morning attacked the adversary along the whole front. The 4th Army is master of the Hollow of FONZASO. The Bologna Brigade, 39th and 40th Regiments, at 6.30 yesterday evening entered FELTRE. The 12th Army has gone through the defile of QUERO and from the mountains is joining up on the PIAVE with the 4th and 8th Armies.

The 8th Army, having descended into the valley of the PIAVE to the S. of BELLUNO, has detachments engaged in the Hollow of FADALTO, which light columns are brilliantly encircling by way of FARRA-VOLPAGO.

At the right wing of the front, the 3d Army prolonged toward the coast by the marine regiment has occupied all the intricate coastal zone which the enemy holds in part, incumbering the rest with entanglements and barricades. A patrol of sailors has reached CAORLE.

Flights of airplanes precede the troops in the pursuit, bombarding, and gunning of the hostile columns. The number of prisoners captured is continually increasing. That of the guns taken is more than 700. The booty is immense; its value is to be estimated in millions.

## SUMMARY OF AIR INFORMATION

## CHANGE IN LOCATION OF UNITS

## LYS-VIMY REGION.

14th Pursuit Flight	Renaix area	October 28	Prisoner's statement,
Last identified in Flanders region, October 14, 1918.			R. A. F.
28th Pursuit Flight	Renaix area	October 28	Prisoner's statement,
Last identified in Metz area (Moselle-Vosges region), October 5, 1918.			R. A. F.
29th Pursuit Flight	Renaix area	October 28	Prisoner's statement,
Last identified in Vimy-Noyon region, August 8, 1918.			R. A. F.
63d Pursuit Flight	Renaix area	October 28	Prisoner's statement,
Last identified in Metz area (Moselle-Vosges region), October 5, 1918.			R. A. F.

## IDENTIFICATIONS

Nil.

## AIRDROMES

## ARGONNE-MOSELLE REGION.

1. *Reported airdrome requiring confirmation by photograph.*  
2172. Carignan W.—12 hangars. Reported October 30, 1918.

## ENEMY AIR ORDER OF BATTLE—ARGONNE TO SWISS BORDER, NOVEMBER 1, 1918

## ARGONNE-MOSELLE REGION.

*Pursuit Flights:*

4th—Marville (Airdrome No. 30).  
6th—Marville (Airdrome No. 30).  
10th—Marville (Airdrome No. 30).  
11th—Marville (Airdrome No. 30).  
12th—Stenay (Airdrome No. 57).  
13th—Stenay (Airdrome No. 57).  
15th—Stenay (Airdrome No. 57).  
18th—Bruville area (probably Conflans Airdrome No. 72).  
19th—Stenay (Airdrome No. 57).  
64th—Mars-la-Tour (before the advance).  
65th—Mars-la-Tour (before the advance).  
67th—Marville (Airdrome No. 30).

*Bombing Flights:*

28th (?)—Cosnes (Airdrome No. 19).  
29th (?)—Cosnes (Airdrome No. 19).  
30th (?)—Cosnes (Airdrome No. 19).

*Battle Flights:*

2d—Autrecourt (Airdrome No. 103).  
5th—Virton (Airdrome No. 67).  
20th—Virton (Airdrome No. 67).  
21st—Virton (Airdrome No. 67).  
32d—Unlocated.  
33d—Virton (Airdrome No. 67).  
37th—Thonne-les-Pres (Airdrome No. 54).  
45th—Unlocated.

*Reconnaissance Flights:*

29th—West of Briey (probably Briey Airdrome No. 16).  
31st—Ozerailles (Airdrome No. 32).  
36th—Jametz S. (Airdrome No. 76 S.).  
37th—Doncourt (Airdrome No. 72).  
44th—Unlocated.  
46th—Briey (Airdrome No. 58).  
47th—Unlocated.  
203d—Jametz N. (Airdrome No. 76 N.).  
206th—Unlocated.  
215th—Probably at Buzancy (Airdrome No. 400).  
219th—Jametz S. (Airdrome No. 76 S.).  
232d—Ozerailles (Airdrome No. 32).  
246th—Briey (Airdrome No. 58).  
273d—Longwy area.  
274th—Stenay (Airdrome No. 57).  
279th—Ozerailles (Airdrome No. 32).  
280th—Longuyon (Airdrome No. 56).  
296th—Conflans area.  
298th—Buxieres (before the advance).

*Mosaic Sections:*

Army Detachment C—Briey (Airdrome No. 16)

## MOSELLE-VOSGES REGION.

*Pursuit Flights:*

78th—Buhl (Airdrome No. 6).  
80th—Marimont (Airdrome No. 47).  
84th—Frescaty (Airdrome No. 7).

*Reconnaissance Flights:*

12th—Manzy (Airdrome No. 11).  
67th—Lorquin (Airdrome No. 12).  
100th—Morhange (Airdrome No. 8).  
199th—Bensdorf (Airdrome No. 45).  
218th—Unlocated.  
242d—Frescaty (Airdrome No. 7).  
257th—Morhange (Airdrome No. 8).  
275th—Metz area.  
281st—Lorquin (Airdrome No. 12).

*Bombing Flights:*

25th—Boulay (Airdrome No. 61).  
26th—Boulay (Airdrome No. 61).  
27th—Boulay (Airdrome No. 61).

*Battle Flights:*

None.

*Home Defense Flights:*

1st—Bitche (Airdrome No. 107).  
2d—Folpersweiler (Airdrome No. 60).  
3d—Morhange (Airdrome No. 8).  
8th—Bitche (Airdrome No. 107).

## VOSGES-SWITZERLAND REGION.

*Pursuit Flights:*

69th—Habsheim (Airdrome No. 26).  
70th—Stotzheim (Airdrome No. 89).  
71st—Habsheim (Airdrome No. 26).  
75th—Habsheim (Airdrome No. 26).  
76th—Habsheim (Airdrome No. 26).

*Home Defense Flights:*

4-B—Fribourg (Airdrome No. 2).

*Reconnaissance Flights:*

4th—Hagenau (Airdrome No. 55).  
10th—Schlestadt (Airdrome No. 4).  
43d—Schlestadt (Airdrome No. 4).  
243d—Colmar (Airdrome No. 28).  
267th—Habsheim (Airdrome No. 26).  
282d—Sierenz (Airdrome No. 27).  
289th—Habsheim (Airdrome No. 26).

5th—Neuf-Brisach (Airdrome No. 23).  
 14th—Lahr (Airdrome No. 41).  
 (?)—Karlsruhe (Airdrome No. 65).

*Mosaic Sections:*

4th—Altdorf (Airdrome No. 88).

*Battle Flights:*

None.

*Bombing Flights:*  
 None.

**ACTIVITY****OUR OWN FORCES:**

*Argonne to the Meuse.*—Pursuit and observation planes maintained patrols and carried out important missions until prohibited by the weather. Visual reconnaissances carried out over Dun-sur-Meuse, Stenay, Beaumont, Le Chesne, Vouz, Grandpre, Buzancy, Stonne, Sivry-sur-Meuse, Ling-devant-Dun, Dun-sur-Meuse, Mouzay, and Reville. Photographic reconnaissances over the route Briailles, Dun-sur-Meuse, and Mouzay Ridge.

*The Meuse to the Moselle.*—Two pursuit patrols. Two visual reconnaissances. One special mission for corps. One protective flight. One infantry liaison.

**ENEMY'S FORCES:**

*Argonne to the Meuse.*—Visibility bad. Few patrols seen and one adjustment made. Propaganda dropped on trenches.

General Impression.—Very little activity.

*The Meuse to the Moselle.*—Visibility poor to impossible. Twenty-five pursuit patrols. One reconnaissance patrol. Two adjustment flights obtaining three brackets. Two balloons in ascension.

General Impression.—Inactive.

**SHORTAGE OF MACHINES, PERSONNEL AND PETROL**

FROM SUMMARY OF AIR INTELLIGENCE (BRITISH), OCTOBER 31, 1918.

(a) **MACHINES.**—A captured pilot states that during the last month there has been a marked shortage of scout machines. In the prisoner's flight there were only six Fokker D.7 scouts, although there were 13 pilots; no more Fokker D.7 machines could be obtained from the aircraft park; Pfalz D.12 or Roland D.6 scouts could have been sent, but these were considered more undesirable than no machines at all; the performance of the two last-named types is greatly inferior to that of Fokker D.7's and they are considered very poor machines.

The prisoner states that the shortage in the 30th Pursuit Flight (and in the whole group) is due more to bad organization than to actual dearth of machines, as some units in other armies are in a much better position.

(b) **PERSONNEL.**—As a result of the shortage of applicants for the air service, men formerly employed as motor mechanics on army Zeppelin airships have been compulsorily transferred to the airplane service for training and employment as pilots.

(c) **PETROL.**—The shortage of petrol, already reported from the statements of prisoners in reconnaissance and battle flights, has also been felt in pursuit units; the 30th Pursuit Flight and other units in the Sixth German Army were allowed to fly for an hour only every other day; all flying other than indispensable war flying was strictly forbidden, and pilots were not permitted to carry out independent patrols.

The situation has, however, slightly improved during the last fortnight in the Sixth Army, at the expense (the prisoner believes) of other fronts.

(d) **MORAL.**—Some three months ago there was a great shortage of pilots for scouts, and pilots were compulsorily transferred to pursuit flights from other types of units, or, if coming from training squadrons, were not allowed to go to two-seaters. (It should be noted that pilots formerly always volunteered for scout units.)

The situation is said to have arisen from the fact that rumors of enormous casualties in pursuit flights had been circulating in the German Air Service, whereas previously they had been considered very "safe" units and had even been dubbed "life insurance companies".

**DISTRIBUTION OF IDENTIFIED GERMAN AIR UNITS, NOVEMBER 2, 1918**

Region.	Pursuit.		Reconnaissance.		Battle.		Bombing.	
	Nov. 1.	Nov. 2.	Nov. 1.	Nov. 2.	Nov. 1.	Nov. 2.	Nov. 1.	Nov. 2.
Flanders .....	9	8	7	7	2	2	6	6
Lys-Vimy .....	7	11	19	19	3	3	6	6
Vimy-Noyon .....	25	24	36	36	12	12	9	9
Noyon-Argonne .....	19	19	46	46	16	16	3	3
Argonne-Moselle .....	12	12	19	19	8	8	3	3
Moselle-Vosges .....	5	3	9	9	..	..	3	3
Vosges-Switzerland .....	5	5	7	7	..	..	..	..
Exterior Fronts .....	2	2	20	20	..	..	..	..
Unlocated .....	1	1	1	1	1	1	..	..
Total .....	85	85	164	164	42	42	30	30

**GERMAN AIRDROME ACCOMMODATION FROM ARGONNE TO SWISS BORDER, OCTOBER 26 AND NOVEMBER 2, 1918**

Region.	Airdromes.		Hangars.		Sheds.		Capacity.	
	Oct. 26.	Nov. 2.	Oct. 26.	Nov. 2.	Oct. 26.	Nov. 2.	Oct. 26.	Nov. 2.
Argonne-Moselle .....	42	42	283	283	72	72	999	999
Moselle-Vosges .....	39	39	264	264	79	79	1,188	1,187
Vosges-Switzerland .....	33	33	272	274	103	103	1,371	1,375
Total .....	114	114	819	821	254	254	3,558	3,561

## SUMMARY OF OFFICIAL COMMUNIQUEES

NOVEMBER 2, 1918.

### AMERICAN.

(November 2, 1918, morning.) The First Army continued its attack W. of the MEUSE this morning. The operation is progressing favorably.

(November 2, 1918, evening.) A series of raids skilfully carried out by troops of the 2d Army in the WOEVRE resulted in the capture of two officers and 63 men.

The 1st Army today continued its successful advance, overcoming all resistance. Among the most important towns taken are CHAMPIGNEULLES, BEFFU-et-MORTHOMME, VERPEL, SIVRY-lez-BUZANCY, THENORGUES, BRIQUENAY, BUZANCY, VILLERS-devant-DUN, and CLERY-le-PETIT. In spite of bad weather conditions, our aviators, flying at extremely low altitudes, carried out important missions over the MEUSE Valley and along the whole front of attack.

The number of prisoners has risen to more than 4,000 men and 192 officers, among whom are four battalion commanders with their staffs.

The enemy was forced to abandon large quantities of matériel of all kinds. An official count shows that 63 guns of medium and light calibers, and hundreds of machine guns, have been captured. A Bavarian battalion of artillery was taken with its personnel, horses, and matériel complete.

In the course of the operations of the past two days south of the river LYS, our troops, acting under the command of the King of the Belgians, advanced nearly 10 miles, reaching the western bank of the SCHELDT and capturing several hundred prisoners.

### FRENCH.

(November 2, 1918, 11 a. m.) On the AISNE front the Germans attempted no reaction during the night except by artillery. Our troops are in contact with the enemy at all points.

The attack began again this morning. The number of prisoners counted up to the present is 1,400.

There is nothing further to report.

(November 2, 1918, evening.) The vigorous attacks executed yesterday and this morning by the 4th Army on the AISNE front in conjunction with the victorious effort of the Americans between the ARGONNE and the MEUSE have forced the enemy to beat a retreat through the ARGONNE Forest. Our troops, hard pressing the enemy's rear-guards who opposed a stubborn resistance in attempting to check our advance, have made important progress along the entire front of attack. On the left we have captured SEMUY and carried our lines to the S. bank of the ARDENNES Canal, which we border for 2 kilometers from SEMUY to NEUVILLE-et-DAV. Farther S. we have reached the outskirts of ALLEUX, Les QUATRE CHAMPS and CROIX-aux-Bois, after having captured the Bois de VANDY and the village of BALLAY in spite of the enemy's resistance, which was especially violent on the ALLEUX Plateau and in the defile of the CROIX-aux-Bois. On the right LONGWE and PRIMAT have fallen into our hands. To the N. of the latter place our troops, pushing beyond the CHENE PATE, are continuing, in spite of the obstacle of the Forest of ARGONNE, to vigorously pursue the enemy, who is falling back and abandoning considerable matériel. The strong counter-attacks of the Germans, especially in the region of SEMUY, have been repulsed and we have been able to increase the number of our prisoners by several hundred.

### BRITISH.

(November 2, 1918, morning.) The fighting yesterday S. of VALENCIENNES was of a very severe nature and was continued until this morning. On the battle front of 6 miles large numbers of the enemy were killed. Many hostile counter-attacks were repulsed and 4,000 prisoners were taken. The 17th Corps, under General Ferguson, and the 22d Corps, under General Godley, gained the high ground S. E. of VALENCIENNES and this morning pressed forward and seized the village of PRESEAU. To the N. the Canadian Corps, under General Currie, met with hard fighting on the outskirts of VALENCIENNES. They have now passed their troops through that town, which is wholly in our possession. There is no change on the remainder of the front.

### ITALIAN.

(November 2, 1918, 12 m.) E. of the BRENTA the pursuit is continuing. On the ASIAGO Plateau the enemy is resisting to the last to give time for the masses in the rear to retire, but the troops of our 6th Army have forced a crossing of the Assa between ROTZE and ROANA, carrying M. CIMONE and M. LISSER after a vigorous struggle, and are advancing in the valley of NOS. The 4th Army has occupied the heights to the N. of the FONZASO, and has pushed columns forward in the SUGANA Valley, the old frontier having been passed yesterday evening. Groups of Alpini of the 12th Army, having crossed the PIAVE by improvised means in the vicinity of BURCHE, have deployed in the sector between FELTRE and S. GIUSTINA. Troops of the 8th Army, who yesterday won important fights at the PASSO-di-S. BALDO and in the basin of FALDATO, have progressed in the CORDEVOLLE Valley and passed beyond the PONTE nelle ALPI, and are marching on LONGARONE.

In the plains the cavalry divisions, under command of the Count of Turni, after overcoming stubborn resistance at CASTELLO d'AVEANO, NOVEREDO, in PIANO, S. MARTINO, and S. QUIRINO, have occupied PORDENONE and passed the GELLINA and MEDUNA. The Savoyan Cavalry Regiment (3d) specially distinguished itself by a brilliant charge. Farther S. the 10th and 3d Armies have continued their advance toward the E.

For courage and daring in action the following units deserve special mention: the whole 23d Division, the Royal Marine Regiment, and the 26th Assault Detachment belonging to the 8th Army.

The Italian and Allied aviators have complete mastery of the air and have carried on unceasing activities. During the night a dirigible bombed the railway stations of the SUGANA Valley.

It is impossible to calculate the number of guns abandoned on lines now far from the battle front and along the roads. Up to the present more than 1,600 have been counted. We have counted more than 80,000 prisoners.

The Italian soldiers liberated from captivity already number several thousand.

### AUSTRIAN.

(November 2, 1918, 7.40 p. m.) On the Italian mountain front our troops carrying out the withdrawal systematically, have taken up the positions occupied at the beginning of the Italian war. In the VENETIAN Plain the withdrawal across the TAGLIAMENTO is in progress.

The evacuation of the entire Serbian region is to be undertaken at once.

SUMMARY OF AIR INFORMATION

CHANGE IN LOCATIONS OF UNITS

VIMY-NOYON REGION.

12th Battle Flight..... Landrecies area ..... September 9..... Document, R. A. F.  
Last identified in Lys-Vimy region, September 7, 1918.  
Document shows that the flight had been on the move immediately prior to September 9.

NOYON-ARGONNE REGION.

1st Bombing Squadron ..... Anor ..... October 11 ..... Report, R. A. F.  
(1st, 2d, and 3d Flights).  
Last identified in Vimy-Noyon region, September 26, 1918.

IDENTIFICATIONS

Nil.

AIRDROMES

ARGONNE-MOSELLE REGION.

1. The following airdromes have been taken during the advance, or are too close to the line to be used :

Region.	Change in accommodation.			Present accommodation.		
	Hangars.	Sheds.	Capacity.	Hangars.	Sheds.	Capacity.
116. Barricourt .....	— 8	..	—16	..	..	..
432. Boulton-aux-Bois .....	— 1	—1	— 5	..	..	..
400. Buzancy.....	—10	..	—20	..	..	..

ENEMY AIR ORDER OF BATTLE—ARGONNE TO SWISS BORDER, NOVEMBER 3, 1918

Same as published in Summary of Information No 94 (November 3, 1918), with the exception of the 215th Reconnaissance Flight ; which was last identified at Buzancy and may now be considered as unlocated in the ARGONNE-MOSELLE region.

ACTIVITY

OUR OWN FORCES :

*Argonne to the Meuse.*—Our planes were active throughout the day, keeping in constant touch with the advance and obtaining important information. Pursuit planes were active carrying out patrols, as well as bombing and machine-gunning troops and towns. Seven visual and eight photographic missions were carried out over the region north of our front and on each side of the Meuse. One hundred and fifty-eight photographs were taken. A total of seven tons of bombs were dropped on Stenay, Martincourt and Beaumont. An important ammunition dump was blown up at Stenay. Five enemy planes were brought down and two balloons destroyed. One of our planes was shot down by machine-gun fire from the ground.

*The Meuse to the Moselle.*—Two patrols made during the day. Reconnaissance squadrons carried out ten visual missions and five photographic. One hundred and thirty-two photographs were taken. Eleven protective flights were made in addition to some artillery adjustments and also two special missions. Six hundred pounds of bombs were dropped on Chambley. Seven thousand leaflets of propaganda were dropped over the lines. One enemy balloon was brought down in flames.

ENEMY'S FORCES :

*Argonne to the Meuse.*—Visibility fair to good. Pursuit planes were only moderately active and showed little aggressiveness. Twelve adjustments were made on the right of the sector. One deep reconnaissance carried out over the region north of Clermont-en-Argonne.

General Impression.—Moderately active.

*The Meuse to the Moselle.*—Visibility poor to fair. There were observed during the day 80 pursuit planes and 38 reconnaissance planes. Five deep reconnaissances were made. Twelve adjustments were carried out, one being over Raucourt, three of these were successful. Nine balloons in ascension.

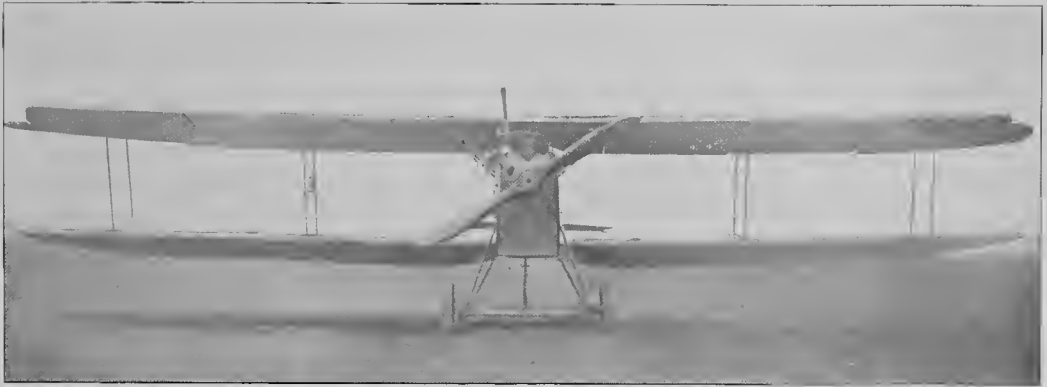
General Impression.—Fairly active.

DISTRIBUTION OF IDENTIFIED GERMAN AIR UNITS, NOVEMBER 3, 1918

Region.	Pursuit.		Reconnaissance.		Battle.		Bombing.	
	Nov. 2.	Nov. 3.	Nov. 2.	Nov. 3.	Nov. 2.	Nov. 3.	Nov. 2.	Nov. 3.
Flanders .....	8	8	7	7	?	2	6	6
Lys-Vimy .....	11	11	19	19	3	2	6	6
Vimy-Noyon .....	24	24	36	36	12	13	9	6
Noyon-Argonne .....	19	19	46	46	16	16	3	6
Argonne-Moselle.....	12	12	19	19	8	8	3	3
Moselle-Vosges .....	3	3	9	9	..	..	3	3
Vosges-Switzerland .....	5	5	7	7	..	..	..	..
Exterior Fronts .....	2	2	20	20	..	..	..	..
Unlocated .....	1	1	1	1	1	1	..	..
Total .....	85	85	164	164	42	42	30	30

Total identified flights (all classes) on all fronts, November 3—347.

Total estimated machines belonging to such flights—2,992.



**HALBERSTADT 2 SEATER  
TYPE C 5**





## HALBERSTADT RECONNAISSANCE PLANE

*Type C5.*

(PHOTOGRAPHS HEREWITH ATTACHED).

This plane was captured intact by American troops on October 25th, in the vicinity of Manoncourt. A description of the type was published in the SUMMARY OF AIR INTELLIGENCE, No. 88, of October 28th.

## GERMAN AIRPLANES

FROM R. A. F. SUMMARY OF AIR INTELLIGENCE, NOVEMBER 1, 1918.

Prisoners state the following :

"Fokker" monoplane (E.5) scout—This machine is still "barred" from employment at the front because of its weak construction as regards planes. It is expected to appear again in the near future, after being strengthened.

"Siemens Schuckert" monoplane—A Siemens Schuckert monoplane scout is reported to have been built and, it is stated, will appear at the front in a few weeks' time. Another prisoner also recently stated that this machine is to appear on the front shortly. It is equipped with a rotary engine, probably a Siemens Schuckert.

Pfalz D.12 and Roland D.6 scouts are extremely unpopular, and it is generally considered that they will never be used on the front to any extent.

Captured documents give reproductions of the following machines :

"Fokker" D.6 scout—This is a tractor biplane fitted with a rotary engine ; there is a forward stagger on the planes and the top plane has a considerably larger span and chord than the bottom plane ; balanced ailerons, similar to those on the D.7 Fokker, are fitted to the top planes, and there is one pair of interplane struts, also of the type used on the D.7, on either side of the fuselage. The fuselage is not unlike that of the Fokker triplane and the whole tail unit is exactly similar to that on the triplane.

A captured scout pilot has never heard of this machine, and a mechanic, who was at the 2d Pursuit Flight School for six months this year, states that this scout was never sent to that training center, where normally all new machines are used. It can, therefore, be accepted that this machine, even if it ever was on the front, was not a success.

Zeppelin C.1—This is a two-seater tractor biplane fitted with a stationary engine ; planes are staggered forward and there are extensions on the top planes, to which unbalanced ailerons are fitted. There is one pair of vertical type interplane struts, slightly slanting outwards, on either side of the fuselage, which is like that of the Albatros C.12 two-seater. The tailplane is semi-circular, similar to the Rumpler ; unbalanced, rectangular elevators are fitted and the rudder is not unlike the A. G. O. C.4 two-seater. Coming on, the machine looks much like the Hannoveraner. Photographs will be circulated as soon as they are available.

## SUMMARY OF OFFICIAL COMMUNIQUE

NOVEMBER 3, 1918.

### AMERICAN.

(November 3, 1918, evening.) The First American Army continued its successful attack today, capturing in its advance the following villages : BOULT-aux-BOIS, AUTRUCHE, BELLEVILLE-sur-BAR, HARRICOURT, GERMONT, BAR, AUTHE, FOSSE, SOMMAUTHE, BELVAL, NOUART, ST. PIERREMONT, BARRICOURT, TAILLY, HALLES, MONTIGNY, SASSEY, CHATILLON-sur-BAR, and BRIEULLES-sur-BAR.

Heavy losses have been inflicted on the enemy, due to the continuous blows during the past month and by the surprise and force of the renewed attack of November 1. Statements of prisoners show that his organizations have been thrown into great confusion. Several complete batteries and whole battalions have been captured by our troops. The number of prisoners now exceeds 5,000 and the number of guns more than 100.

During the past three days we have already penetrated to a depth of 12 miles on an 18 miles front, and gained control of dominating heights which enables us to bring the fire of our heavy artillery on the important railroad lines at MONTMEDY, LONGUYON and CONFLANS.

Since November 1, 17 German divisions have been identified on the front of the attack, nine of which were in line on that morning ; and eight additional divisions have reinforced the line since the beginning of the attack in a futile effort to stop our progress.

# SUMMARY OF AIR INFORMATION

## CHANGE IN LOCATIONS OF UNITS

### NOYON-ARGONNE REGION.

231st Reconnaissance Flight . . . . . Marlemont . . . . . October 19 . . . . . Machine brought down by French.

Last identified in Vimy-Noyon region, June 26, 1918.

Prisoners stated there was also another reconnaissance flight on this field and thought it to be the 286th. This is probably correct, as the 286th Reconnaissance Flight was last identified in this region prior to the Allied advance.

### ARGONNE-MOSELLE REGION.

74th Pursuit Flight . . . . . Briey area . . . . . September 22 . . . . . Document, R. A. F.  
Last identified in Noyon-Argonne region, August, 15, 1918.

## IDENTIFICATIONS

### ARGONNE-MOSELLE REGION.

274th Reconnaissance Flight . . . . . Stenay area . . . . . October 4 . . . . . Document, R. A. F.  
Last identified at Stenay, September 29, 1918.

## AIRDROMES

### NOYON-ARGONNE REGION.

Changes in accommodation.			Present accommodation.			
	Hangars.	Sheds.	Capacity.	Hangars.	Sheds.	Capacity.
I. Changes in existing airdromes :						
91. Malmy . . . . .	—5	..	—5	18	..	18
Decrease since August 1, 1918. French photo, October 29, 1918. The estimated capacity of the hangars (T) on this field has been based on bombing machines, but at present the airdrome is occupied by pursuit planes and will accommodate 54 of this class of machine.						

### ARGONNE-MOSELLE REGION.

I. New airdromes :						
9. Martincourt . . . . .	+6	..	+12	6	..	12
Five kilometers north of Stenay. French photo, October 29, 1918. Airdrome is unoccupied,						
2. Changes in existing airdromes :						
103. Autrecourt . . . . .	..	—3	—16	..	6	64
Decrease since September 16, 1918. One shed appears to have been destroyed by fire. French photo, October 29, 1918.						
30. Marville . . . . .	+2	—1	..	14	9	60
Change since August 25, 1918. Airdrome is occupied by pursuit and reconnaissance or battle planes. French photo, October 30, 1918.						
80. Mouzay . . . . .	—3	..	—5	..	4	15
Decrease since October 10, 1918. French photo, October 30, 1918.						
75. Mouzon . . . . .	+9	..	+18	12	7	64
Increase since August 21, 1918. French photo, October 29, 1918.						
57. Stenay . . . . .	+5	..	+10	22	1	56
Increase since July 2, 1918. Seven new hangars have been constructed, but two structures formerly thought to be hangars appear to be now used as storehouses. French photo, October 30, 1918.						
3. Photographs of the following airdromes show no changes:—						
54. Thonne-les-Pres . . . . .	..	..	..	2	3	38
French photo, October 30, 1918.						
76. Jametz . . . . .	..	..	..	10	4	32
French photo, October 30, 1918.						
105. Bulson . . . . .	..	..	..	8	..	12
French photo, October 29, 1918.						

## ENEMY AIR ORDER OF BATTLE—ARGONNE TO SWISS BORDER, NOVEMBER 4, 1918

### ARGONNE-MOSELLE REGION.

#### Pursuit Flights :

4th—Marville (Airdrome No. 30).  
6th—Marville (Airdrome No. 30).  
10th—Marville (Airdrome No. 30).  
11th—Marville (Airdrome No. 30).  
12th—Stenay (Airdrome No. 57).  
13th—Stenay (Airdrome No. 57).  
15th—Stenay (Airdrome No. 57).  
18th—Bruville area (probably Conflans Airdrome No. 72).  
19th—Stenay (Airdrome No. 57).  
64th—Mars-la-Tour (before the advance).  
65th—Mars-la-Tour (before the advance).  
67th—Marville (Airdrome No. 30).  
\*74th—Briey area.

#### ombing Flights :

28th (?)—Cosnes (Airdrome No. 19).  
29th (?)—Cosnes (Airdrome No. 19).  
30th (?)—Cosnes (Airdrome No. 19).

#### Battle Flights :

2d—Autrecourt (Airdrome No. 103).  
5th—Virton (Airdrome No. 67).  
20th—Virton (Airdrome No. 67).

21st—Virton (Airdrome No. 67).  
32d—Unlocated.  
33d—Virton (Airdrome No. 67).  
37th—Thonne-les-Pres (Airdrome No. 54).  
45th—Unlocated.

#### Reconnaissance Flights :

29th—West of Briey (probably Briey Airdrome No. 16).  
31st—Ozerailles (Airdrome No. 32).  
36th—Jametz S. (Airdrome No. 76 S.).  
37th—Doncourt (Airdrome No. 72).  
44th—Unlocated.  
46th—Briey (Airdrome No. 58).  
47th—Unlocated.  
203d—Jametz N. (Airdrome No. 76 N.).  
206th—Unlocated.  
\*215th—Unlocated.  
219th—Jametz S. (Airdrome No. 76 S.).  
232d—Ozerailles (Airdrome No. 32).  
246th—Briey (Airdrome No. 58).  
273d—Longwy area.  
274th—Stenay (Airdrome No. 57).  
279th—Ozerailles (Airdrome No. 32).  
280th—Longuyon (Airdrome No. 56).

\*Flights in which change in locations has occurred.

296th—Conflans area.  
298th—Buxieres (before the advance).

*Mosaic Sections:*

Army Detachment C—Briey (Airdrome No. 16).

## MOSELLE-VOSGES REGION.

*Pursuit Flights:*

78th—Buhl (Airdrome No. 6).  
80th—Marimont (Airdrome No. 47).  
84th—Frescaty (Airdrome No. 7).

*Bombing Flights:*

25th—Boulay (Airdrome No. 61).  
26th—Boulay (Airdrome No. 61).  
27th—Boulay (Airdrome No. 61).

*Battle Flights:*

None.

*Reconnaissance Flights:*

12th—Many (Airdrome No. 11).  
67th—Lorquin (Airdrome No. 12).  
100th—Morhange (Airdrome No. 8).  
199th—Bensdorf (Airdrome No. 45).  
218th—Unlocated.  
242d—Frescaty (Airdrome No. 7).  
257th—Morhange (Airdrome No. 8).  
275th—Metz area.  
281st—Lorquin (Airdrome No. 12).

*Home Defense Flights:*

1st—Bitche (Airdrome No. 107).  
2d—Folpersweiler (Airdrome No. 60).  
3d—Morhange (Airdrome No. 8).  
8th—Bitche (Airdrome No. 107).

## VOSGES-SWITZERLAND REGION.

*Pursuit Flights:*

69th—Habsheim (Airdrome No. 26).  
70th—Stotzheim (Airdrome No. 89).  
71st—Habsheim (Airdrome No. 26).  
75th—Habsheim (Airdrome No. 26).  
76th—Habsheim (Airdrome No. 26).

*Reconnaissance Flights:*

4th—Hagenau (Airdrome No. 55).  
10th—Schlestadt (Airdrome No. 4).  
43d—Schlestadt (Airdrome No. 4).  
243d—Colmar (Airdrome No. 28).  
267th—Habsheim (Airdrome No. 26).  
282d—Sierentz (Airdrome No. 27).  
289th—Habsheim (Airdrome No. 26).

*Home Defense Flights:*

4-B—Fribourg (Airdrome No. 2).  
5th—Neuf-Brisach (Airdrome No. 23).  
14th—Lahr (Airdrome No. 41).  
(?)—Karlsruhe (Airdrome No. 65).

*Mosaic Sections:*

4th—Altdorf (Airdrome No. 88).

*Battle Flights:*

None.

*Bombing Flights:*

None.

## ACTIVITY

## OUR OWN FORCES.

*Argonne to the Meuse.*—Our pursuit planes continually patrolled the lines doing protection work, and harassed rear areas with machine guns and bombs. Five reconnaissance missions were performed, three of which were photographic and forty photographs were taken. Our reconnaissance and adjustment planes were active all day carrying out missions and maintaining contact with our troops. A total of five tons of bombs was dropped on Montmedy and Chauvency-le-Chateau. Thirty enemy planes were brought down and three hostile balloons were destroyed. Five of our balloons were shot down and nine of our planes are missing.

*The Meuse to the Moselle.*—Four pursuit patrols were carried out during the day. Reconnaissance squadrons made one special, and four visual reconnaissances. One infantry patrol was effected.

## ENEMY'S FORCES.

*Argonne to the Meuse.*—Visibility fair to good. Pursuit planes were active and aggressive in the center and on the right of the sector, particularly in the rear areas. Six hostile planes were reported over Clermont-en-Argonne. Reconnaissance and adjusting machines showed slight activity except East of the Meuse where twelve adjustments were made. Few hostile balloons were reported.

General Impression.—Abnormal activity of pursuit aviation.

*The Meuse to the Moselle.*—Visibility fair. There was abnormal activity of pursuit aviation in the whole sector. Eighty-six pursuit planes were reported and five reconnaissance planes, of which four were observed in the sector west of Lachaussee. Six deep reconnaissances were made, one of which was reported over Commercy. Seven balloons were in ascension.

General Impression.—Abnormal activity of pursuit aviation.

## DISTRIBUTION OF IDENTIFIED GERMAN AIR UNITS, NOVEMBER 4, 1918

Region.	Pursuit.		Reconnaissance.		Battle.		Bombing.	
	Nov. 3.	Nov. 4.	Nov. 3.	Nov. 4.	Nov. 3.	Nov. 4.	Nov. 3.	Nov. 4.
Flanders .....	8	8	7	7	2	2	6	6
Lys-Vimy .....	11	11	19	19	2	2	6	6
Vimy-Noyon .....	24	24	36	35	13	13	6	6
Noyon-Argonne .....	19	18	46	47	16	16	6	6
Argonne-Moselle .....	12	13	19	19	8	8	3	3
Moselle-Vosges .....	3	3	9	9	..	..	3	3
Vosges-Switzerland .....	5	5	7	7	..	..	..	..
Exterior Fronts .....	2	2	20	20	..	..	..	..
Unlocated .....	1	1	1	1	1	1	..	..
Total .....	85	85	164	164	42	42	30	30

Total identified flights (all classes) on all fronts, November 4—347.

Total estimated machines belonging to such flights—2,992.

# NEW TYPE OF AIRCRAFT

FROM R. A. F. SUMMARY OF TECHNICAL AIR INTELLIGENCE, OCTOBER 30, 1918.

FOKKER MONOPLANE D.IX.—A monoplane, indented by this number and stated to be constructed entirely of aluminum, is reported to have been tested recently at the Fokker aerodrome at Schwerin. The characteristics are stated to be as follows :

*Span.*—31 ft. 4 in. *Length.*—26 ft. 4 in.

*Engine.*—160-hp. Mercedes.

*Armament.*—Two synchronised machine guns.

*Speed.*—125 m. p. h.

(NOTE.—This machine appears to be similar to the Fokker Monoplane E. V., except that it is fitted with a stationary engine.) (L. c. I., 425.)

## ARTILLERY AIRPLANE WORK

TRANSLATION OF A GERMAN DOCUMENT : FROM BRITISH SUMMARY, NOVEMBER 2, 1918

1. The experiences of July 15 and 16 have been the same as those of previous offensives. Numerous attempts to range by airplanes provided with wireless equipment have been unsuccessful. The Air Service Liaison Officer, owing to the obscurity of the situation and his continuous operations work, was unable to fix the reasons for this want of success. It was only after the 17th that he was able to investigate the matter, and to discover that wireless officers and personnel were by no means equal to their task, and that batteries were unable to fire owing to lack of ammunition. He states definitely that the incapacity of the artillery (wireless officer, wireless personnel, and battery personnel) to exploit the efforts of the artillery observer was markedly evident.

2. These facts, as well as my remarks at conferences held during the preparatory period with artillery commanders and staffs, prove that perfect co-operation between the airplane and the artillery, and immediate exploitation of the observations made during moving warfare, depend not only on possessing a highly experienced and intelligent observer, but also upon a more thorough training of the artillery. Keeness, systematic training, and the experiences of position warfare are not sufficient while responsible commanders remain ignorant of airplane artillery work, the conditions governing its employment, its role, and the striking value of this method of observation.

The following principle is not yet sufficiently appreciated :

“Only the best artillery officers, with wide experience of wireless work, and first-class operators should be employed at ground stations.”

Under present conditions officers continue to be placed in charge of these stations hap-hazardly and are found from among quite inexperienced young officers, or from officers who are not considered reliable, instead of giving the command of these posts the same standing as that of a battery or even making the latter subordinate to the officer in charge of a ground station. The Flight, on the other hand, provides the artillery with its best and most experienced observer for work in the air ; the airplane is equally carefully chosen. An observer who is worth his salt often makes three or four flights a day and thus shows his appreciation of the needs of moving warfare, and yet people are still found tolerating neglect of duty on the part of the artillery personnel comprising the wireless telegraph operators.

The following is an example of a complaint by the Air Service Liaison Officer of the 2d Guard Division on the evening of July 19 :

“I visited the ground station of the 1st Battery of the 402d Artillery Regiment at 8 a. m. ; Lieutenant Wehrman’s calls were, as I satisfied myself personally, excellent and could be heard perfectly. The wireless operators also took them correctly. Although ordered to be at the ground station at 7 a. m., the officer was still in bed in a dugout ; the wireless operators did not know how to lay out the ground signals.

I then visited the ground station of the 10th Battery, 3d Heavy Artillery. The ground signals were well laid out, but the wireless officer was having a bath in front of his dugout ; the wireless operators pretended that they had not heard any calls from the airplane.

Finally, after I had severely reprimanded them, they admitted that they had been taking in the daily weather report at 7.30, and consequently had not heard the airplane call.”

I have only quoted this report as one example.

The artillery commander of the 2d Guard Div. has taken energetic action and required an explanation from the two wireless officers. He recognized that the fault lay with the artillery, and from the example quoted above it can be easily seen why, under the difficult conditions of the opening days of attack, it was impossible for airplanes to range batteries in spite of there being a number of important targets.

The breakdown of further co-operation between airplanes and artillery was still more emphasized owing to lack of ammunition, the enemy’s counter-attack, and the necessity of using all the artillery to engage the enemy assaulting troops.

Ranging, from the air, as I said above, was a pitiable failure ; on the other hand, the artillery airplane might have been of the greatest use in locating targets and dropping messages indicating them.

(Signed) LUDENDORFF.

## SUMMARY OF OFFICIAL COMMUNIQUÉS

NOVEMBER 4, 1918.

AMERICAN.

(November 4, 1918, morning.) Carrying our attack farther into the enemy’s territory today, our troops have passed through the Bois de BELVAL and the Bois du PORT-GERACHE, and are on the heights 2 kilometers S. of BEAUMONT.

Farther to the W. we are approaching VERRIERES. All of the towns situated on the W. bank of the MEUSE S. of HALLES are now in our hands.

This morning our attack was extended to the E. bank of the MEUSE, where it is progressing favorably.

(November 4, 1918, evening.) On the entire front from the MEUSE to the BAR the First Army continued its advance. On the extreme right, breaking down the last efforts of the enemy to hold the high ground, our troops drove him into the valley of the MEUSE, and forcing their way through the forest of DIEULET, occupied LANEUVILLE opposite the important crossing of the MEUSE at STENAY. The BEAUMONT-STENAY road is in our possession and our troops are on the heights overlooking BEAUMONT. On the left our line has advanced, in spite of heavy machine gun and artillery opposition, to GRANDES ARMOISES. The enemy again today threw in fresh troops in an effort to arrest the penetration of his lines by our victorious attack.

Our vigorous advance compelled the enemy to abandon large stores of undamaged munitions, food and engineer matériel.

SUMMARY OF AIR INFORMATION

CHANGE IN LOCATIONS OF UNITS

FLANDERS REGION.

250th Reconnaissance Flight .... Deynze front ..... October 24..... Machine shot down by French.  
Last identified in Lys-Vimy region, October 9, 1918.  
This flight was then working for the 52d Reserve Division.

LYS-VIMY REGION.

208th Reconnaissance Flight .... St. Amand area ..... October 17..... Document, R. A. F.  
Last identified in the Vimy-Noyon region, September 26, 1918.  
210th Reconnaissance Flight .... Ville Pommeroeul (N. W.)  
of St. Ghislain) ..... October 15.....  
Last identified in Vimy-Noyon region, October 7, 1918.

IDENTIFICATIONS

ARGONNE-MOSELLE REGION.

29th Reconnaissance Flight ..... Verdun sector..... October 13..... Document, R. A. F.  
Last identified at Briey (same region) September 24 (probably still there).  
On account of the American advance on November 4, the following flights, which were last identified at Stenay, may now be considered as unlocated in the Argonne-Moselle region :  
12th Pursuit Flight  
13th Pursuit Flight  
15th Pursuit Flight  
19th Pursuit Flight  
274th Reconnaissance Flight.

AIRDROMES

NOYON-ARGONNE REGION.

		Changes in accommodation.			Present accommodation.		
		Hangars.	Sheds.	Capacity.	Hangars.	Sheds.	Capacity.
1.	407. Clairfontaine .....	2	..	4	2	..	4
	401. Fournies .....	1	..	2	1	..	2
	4 km. E. of La Capelle. Airdrome is unoccupied. British photo, October 28, 1918.						
	Formerly reported airdrome No. 2507. Airdrome is unoccupied. British photo, October 28, 1918.						
	400. Mariembourg .....	6	..	12	6	..	12
	12 km. N. E. of Chimay. Airdrome is unoccupied. British photo, October 30, 1918.						
	408. Philippeville.....	14	1	32	14	1	32
	20 km. N. E. of Chimay. Airdrome is occupied by scout machines. British photo, October 30, 1918.						
2.	Airdrome vacated on account of advance.						
	409. Le Chesne .....	—2	—2	—20	..	..	..
3.	Reported airdromes requiring confirmation by photograph.						
	2535. Macon. Reported October 29, 1918.						
	3 km. W. of Chimay.						
	2536. Trelon. Reported October 29, 1918.						
	12 km. W. of Chimay.						
4.	Reported airdromes photographed and found not to exist.						
	2513. Liessies.						
	2532. Wignehies.						

ARGONNE-MOSELLE REGION.

1. Photograph of the following airdromes show no change in accommodation.
- |   |    |    |    |    |    |    |
|---|----|----|----|----|----|----|
| 85. Giraumont.....  | .. | .. | .. | 10 | .. | 30 |
| Two hangars have been removed from the south side of the road and two constructed on the north side |    |    |    |    |    |    |
| U. S. photo, October 31, 1918.  |    |    |    |    |    |    |
2. Airdromes now in Allied territory or too close to the line to be used.
- |                  |     |    |     |    |    |    |
|------------------|-----|----|-----|----|----|----|
| 80. Mouzay ..... | ..  | —4 | —15 | .. | .. | .. |
| 57. Stenay ..... | —22 | —1 | —56 | .. | .. | .. |

ENEMY AIR ORDER OF BATTLE—ARGONNE TO SWISS BORDER, NOVEMBER 5, 1918

ARGONNE-MOSELLE REGION.

Pursuit Flights.

- 4th—Marville (Airdrome No. 30).
- 6th—Marville (Airdrome No. 30).
- 10th—Marville (Airdrome No. 30).
- 11th—Marville (Airdrome No. 30).
- \*12th—Unlocated.
- \*13th—Unlocated.
- \*15th—Unlocated.
- 18th—Bruville area (probably Conflans Airdrome No. 72).
- \*19th—Unlocated.
- 64th—Mars-la-Tour (before the advance).
- 65th—Mars-la-Tour (before the advance).
- 67th—Marville (Airdrome No. 30).
- \*74th—Briey area.

Bombing Flights.

- 28th (?)—Cosnes (Airdrome No. 19).

Reconnaissance Flights.

- 29th (?)—Cosnes (Airdrome No. 19).
- 30th (?)—Cosnes (Airdrome No. 19).

Battle Flights.

- 2d—Autrecourt (Airdrome No. 103).
- 5th—Virton (Airdrome No. 67).
- 20th—Virton (Airdrome No. 67).
- 21st—Virton (Airdrome No. 67).
- 32d—Unlocated.
- 33d—Virton (Airdrome No. 67).
- 37th—Thonne-les-Pres (Airdrome No. 54).
- 45th—Unlocated.
- 29th—West of Briey (probably Briey Airdrome No. 16).
- 31st—Ozerailles (Airdrome No. 32).
- 36th—Jamez S. (Airdrome No. 76 S.).
- 37th—Doncourt (Airdrome No. 72).

\*Flights in which change in locations has occurred.

44th—Unlocated.  
 46th—Briey (Airdrome No. 58).  
 47th—Unlocated.  
 203d—Jametz N. (Airdrome No. 76 N.).  
 206th—Unlocated.  
 \*215th—Un located.  
 219th—Jametz S. (Airdrome No. 76 S.).  
 232d—Ozerailles (Airdrome No. 32).  
 246th—Briey (Airdrome No. 58).  
 273d—Longwy area.  
 \*274th—Unlocated.  
 279th—Ozerailles (Airdrome No. 32).

280th—Longuyon (Airdrome No. 56).  
 296th—Conflans area.  
 298th—Buxieres (before the advance.)

*Mosaic Sections.*

Army Detachment C—Briey (Airdrome N. 16).

## MOSELLE-VOSGES REGION.

*Pursuit Flights.*

78th—Buhl (Airdrome No. 6).  
 80th—Marimont (Airdrome No. 47).  
 84th—Frescaty (Airdrome No. 7).

*Reconnaissance Flights.*

12th—Many (Airdrome No. 11).  
 67th—Lorquin (Airdrome No. 12).  
 100th—Morhange (Airdrome No. 8).  
 199th—Bensdorf (Airdrome No. 45).  
 218th—Unlocated.  
 242d—Frescaty (Airdrome No. 7).  
 257th—Morhange (Airdrome No. 8).  
 275th—Metz area.  
 281st—Lorquin (Airdrome No. 12).

*Bombing Flights.*

25th—Boulay (Airdrome No. 61).  
 26th—Boulay (Airdrome No. 61).  
 27th—Boulay (Airdrome No. 61).

*Battle Flights.*

None.

*Home Defense Flights.*

1st—Bitche (Airdrome No. 107).  
 2d—Folpersweiler (Airdrome No. 60).  
 3d—Morhange (Airdrome No. 8).  
 8th—Bitche (Airdrome No. 107).

## VOSGES-SWITZERLAND REGION.

*Pursuit Flights.*

69th—Habsheim (Airdrome No. 26).  
 70th—Stotzheim (Airdrome No. 89).  
 71st—Habsheim (Airdrome No. 26).  
 75th—Habsheim (Airdrome No. 26).  
 76th—Habsheim (Airdrome No. 26).

*Home Defense Flights.*

4-B—Fribourg (Airdrome No. 2).  
 5th—Neuf-Brisach (Airdrome No. 23).  
 14th—Lahr (Airdrome No. 41).  
 (?)—Karlsruhe (Airdrome No. 65).

*Bombing Flights.*

None.

*Reconnaissance Flights.*

4th—Hagenau (Airdrome No. 55).  
 10th—Schlestadt (Airdrome No. 4).  
 43d—Schlestadt (Airdrome No. 4).  
 243d—Colmar (Airdrome No. 28).  
 267th—Habsheim (Airdrome No. 26).  
 282d—Sierentz (Airdrome No. 27).  
 289th—Habsheim (Airdrome No. 26).

*Mosaic Sections.*

4th—Altdorf (Airdrome No. 88).

*Battle Flights.*

None.

## ACTIVITY

## OUR OWN FORCES:

*Argonne to the Meuse.*—Pursuit planes patrolled the sector as well as bombing towns and machine gunning troops. Night reconnaissance over Damvillers, Mousay, Stenay and Sedan. Four reconnaissance missions were carried out over Le Chesne, Mezières, Sedan, Carignan, Montmedy, Longuyon and Damvillers. Three more over the region of Spincourt, Briey, Conflans and Etain. Two photographic missions were carried out over the courses Damvillers, Montmedy, Beaumont and Sivray-sur-Meuse, Damvillers, Mangiennes, Ornes. Thirty good photographs were taken. Bombing planes dropped 1,400 kilograms of bombs on Raucourt and Mouzon. Seventeen enemy planes were destroyed or forced down out of control. Two balloons destroyed. Seven of our planes are missing.

*The Meuse to the Moselle.*—Three pursuit patrols were carried out. Reconnaissance missions operating along the front and over Chambley-Puixieux consisted of eleven visual and two photographic missions. Three adjustments, two infantry liaisons and one special mission were also effected. Fifteen thousand propaganda pamphlets were dropped over the lines. One enemy plane brought down and five balloons.

## ENEMY'S FORCES:

*Argonne to the Meuse.*—Visibility fair to bad. Planes operating in strong formations. Low flying was reported, as well as the machine-gunning of our troops. Twelve adjustments were reported on the right of the sector. Very few reconnaissance planes were reported. Clery-le-Grand, Clery-le-Petit, Coulcon, Briquenay and Germont were bombed, as well as roads and trenches. Five balloons in ascension. General Impression.—Active but less aggressive.

*The Meuse to the Moselle.*—Visibility fair. Eighty-four pursuit planes reported. Seventeen reconnaissances in the sector from Lachaussee to Port-sur-Seille. Six deep reconnaissances to the left of Lachaussee and two to the right of the Moselle. Fifteen balloon ascensions.

## DISTRIBUTION OF IDENTIFIED GERMAN AIR UNITS, NOVEMBER 5, 1918

Region.	Pursuit.		Reconnaissance.		Battle.		Bombing.	
	Nov. 4.	Nov. 5.	Nov. 4.	Nov. 5.	Nov. 4.	Nov. 5.	Nov. 4.	Nov. 5.
Flanders .....	8	8	7	8	2	2	6	6
Lys-Vimy .....	11	11	19	26	2	2	6	6
Vimy-Noyon.....	24	24	35	33	13	13	6	6
Noyon-Argonne.....	18	18	47	47	16	16	6	6
Argonne-Moselle.....	13	13	19	19	8	8	3	3
Moselle-Vosges.....	3	3	9	9	..	..	3	3
Vosges-Switzerland.....	5	5	7	7	..	..	..	..
Exterior Fronts.....	2	2	20	20	..	..	..	..
Unlocated .....	1	1	1	1	1	1	..	..
Total .....	85	85	164	164	42	42	30	30

Total identified flights (all classes) on all fronts, November 5—347.

Total estimated machines belonging to such flights—2,992.

### BOMBING DURING THE MONTH OF OCTOBER

During the month of October the 1st Day Bombardment Group dropped 46,133 kilograms (50 tons) of bombs on 22 towns and villages, the principal targets being:

Bantheville.	Bayonville.
Grandpre.	Buzancy.
Dun-sur-Meuse.	Briquenay.
Landres-St. Georges.	Damvillers.
Villers-devant-Dun.	Belleville.

### REAPPEARANCE OF PURSUIT MONOPLANE "FOKKER E. 6"

FROM C. I. S. DE CHALONS-SUR-MARNE, OCTOBER 30, 1918.

Aviators of the 231st Reconnaissance Flight, brought down October 19, announce the completion of certain changes in the construction of the pursuit monoplane Fokker E 6.

The spars of the planes have been strengthened by metal reinforcements, and it is said that this type is beginning to reappear on the front, the first ones being issued to the crack flights.

NOTE.—This is the first time that the Fokker E 6 has been mentioned, although the Fokker Monoplane Scout E 5 has been reported as having wings too weak for service at the front. It is probable that the E 6 is the same plane strengthened.

### BALLOON BARRAGE

FROM BRITISH SUMMARY OF AIR INTELLIGENCE, NOVEMBER 2, 1918.

From recent reports it appears that the defense of some individual factories in Germany by balloon barrage (*Luftsperr*) is carried out on the following lines:

Balloons are let up at intervals of about 400 yards in a rough circle around the objective to be defended, the radius of the circle varying with the size of the factory.

Thus, at Oppau, the chemical works are defended by balloons situated in a circle, with a radius of 1,500 yards from the center of the works.

The average height of the balloons appears to be about 4,000 to 5,000 feet, but pilots report having sighted a balloon barrage at a height of 6,000 to 8,000 feet.

In addition to the cable connecting the balloon with the winch, a supplementary cable, fastened to the ground some distance from the winch, is used to keep the balloon steady.

Horizontal wires connect adjacent balloons, and it is believed that vertical wires are suspended from these horizontal wires forming a species of net.

The horizontal wires are electrified, though the object of this electrification is not apparent.

One report states that the power station of the Bayer's chemical works at Leverkusen is provided with an aerial about 450 feet high, from the top of which electric cables lead the current to the nacelle of each balloon. Notices also have appeared in the Mannheim press warning the population not to touch any of the wires used in connection with the balloon barrage, as they are charged with a strong electric current.

### SUMMARY OF OFFICIAL COMMUNIQUEES

NOVEMBER 5, 1918.

#### AMERICAN.

(November 5, 1918, morning.) This morning the 1st Army resumed the attack. In spite of desperate opposition our troops have forced a crossing of the MEUSE at BRIEULLES and at CLERY-le-PETIT. They are now developing a new line in the heavily-wooded and very difficult terrain on the heights E. of the river between these points. On the entire front the enemy is opposing our advance with heavy artillery and machine-gun fire, notwithstanding which we are making excellent progress. The W. bank of the MEUSE as far N. as opposite POUILLY lies in our hands.

In the course of several successful raids in the WOEVRE detachments of the 2d Army have penetrated the enemy's trenches, destroying matériel, dugouts, and emplacements, and capturing prisoners.

#### FRENCH.

(November 5, 1918, morning.) The repeated successes of our troops have obliged the enemy to make a new withdrawal at several points on the front. Our troops with untiring dash have closely maintained contact in the constant pursuit of the rear-guards charged with covering his retreat and delaying our advance.

In the region N. E. of GUISE, we occupied BERGUES-sur-SAMRBE, where 200 civilians were liberated. This morning we resumed our attacks and advanced on the entire front of the 1st Army. Between the PERON and the SERRE we have taken BOIS-les-PARGNY.

In the region N. of SISSONNE we have reached a line passing by the sugar-mill at FROIDMONT, W. of AUTREMENCOURT, CUIRIEUX, GONDELANCOURT, and MACHECOURT. Our advance guards are advancing, supported by the artillery.

Between SISSONNE and CHATEAU-PORCIEN we penetrated the HUNDING STELLUNG at all points where the enemy was still holding on and forced his detachments to withdraw.

Our advance is general between the E. of ST. QUENTIN-le-PETIT and the outskirts of HERPY.

#### BRITISH.

(November 4, 1918, 9.50 a. m.) At dawn this morning we attacked on a wide front S. of the SCHELDT. The attack is reported to have been launched satisfactorily.

(November 4, 1918, evening.) This morning troops of the 4th, 3d and 1st British Armies attacked between the SAMBRE Canal at OISY and the river SCHELDT, N. of VALENCIENNES. On the whole of this 30-mile front troops from the United Kingdom and New Zealand have broken deeply into the enemy's positions. Over 10,000 prisoners and 200 guns are already reported captured. On the right of the attack the 1st and 32d Divisions advanced to the assault in conjunction with French forces operating to the S. of them. With great dash and gallantry these two divisions stormed the formidable obstacle presented by the line of the SAMBRE Canal and in spite of strong resistance from the enemy have pressed on to a depth of over 3 miles to the E. of it. In this operation the 1st Division, under the command of General Strickland, having captured the town of CATILLON, forced passages of the canal opposite that place and near the lock 2 miles S. of it. At the latter point, assisted by Royal Engineers, the 1st Cameron Highlanders effected the passage of the canal in six minutes. In its subsequent advance this division captured the villages of FESMY, HAUTREVE, and La GROISE, with 1,500 prisoners. On its left the 32d Division crossed the canal at ORS and after severe fighting took RUE d'en HAUT. Having cleared the line of the canal to the S. and N. of this village, it continued its advance and drove the enemy from the villages of MEZIERES, La FOLIE and SAMBRETON.



# SUMMARY OF AIR INFORMATION

## CHANGE IN LOCATION OF UNITS

### FLANDERS REGION.

292d (Bav.) Reconnaissance Flight. Lendeledé front ..... October 11 ..... Document, R. A. F.  
Last identified in Lys-Vimy region, October 3, 1918.  
The flight was then working for the 1st Bav. Res. Div.

## IDENTIFICATIONS

### ARGONNE-MOSELLE REGION.

3d Army Aircraft Park ..... Mouzon N. .... October 25 ..... Prisoner's statement,  
R. A. F.  
Last identified at same place, April 26, 1918.  
Another prisoner recently stated that this park was at Autrecourt. These two airdromes are very close together and  
it is possible that part of the park is located at each place.  
31st Reconnaissance Flight ..... Machine down at Hage-  
ville ..... November 5 ..... Pilot landed at  
Dommartin.  
This flight was last identified at Ozerailles (same region) October 25, 1918.

### MOSELLE-VOSGES REGION.

Army Aircraft Park C ..... Frescaty (S. of Metz).. October 25 ..... Prisoner's statement,  
R. A. F.  
Last identified at same place, October 6, 1918.  
19th Army Aircraft Park..... Felpersweiler..... October 25 ..... Prisoner's statement,  
R. A. F.  
Last identified at same place, August 14, 1918.  
Eighth Bombing Squadron (25th, 26th and 27th flights—A non-commissioned officer of the staff of this squadron  
writes on October 22d from the German Field Postoffice 2274, in the Briey-Metz area. This squadron was last identified  
at Bonlay (Moselle-Vosges region). (Further confirmation of this move is required.)

### VOSGES-SWITZERLAND REGION.

Army Aircraft Park A ..... Strasbourg (Neuhof)... October 25 ..... Prisoner's statement,  
R. A. F.  
Last identified at same place, September 12, 1918.  
Army Aircraft Park B ..... Neuf-Brisach ..... October 25 ..... Prisoner's statement,  
R. A. F.  
Last identified at same place, July 29, 1918.

## ENEMY AIR ORDER OF BATTLE—ARGONNE TO SWISS BORDER, NOVEMBER 6, 1918

### NOYON-ARGONNE REGION.

Latest identifications show that there are 18 pursuit, 47 reconnaissance, 16 battle, 6 bombing and 1 Giant flight  
in this region, but owing to the recent Allied advances, they are all unlocated at the present time, with the exception  
of the following flights:

#### Bombing Flights:

- 1st—Anor.
- 2d—Anor.
- 3d—Anor.

#### Reconnaissance Flights:

- 231st—Marlemont.
- 286th—Marlemont.

#### Giant Flight:

- 500th—Morville.

### ARGONNE-MOSELLE REGION.

#### Pursuit Flights:

- 4th—Marville (Airdrome No. 30).
- 6th—Marville (Airdrome No. 30).
- 10th—Marville (Airdrome No. 30).
- 11th—Marville (Airdrome No. 30).
- \*12th—Unlocated.
- \*13th—Unlocated.
- \*15th—Unlocated.
- 18th—Bruville area (probably Conflans Airdrome  
No. 72).
- \*19th—Unlocated.
- 64th—Mars-la-Tour (before the advance).
- 65th—Mars-la-Tour (before the advance).
- 67th—Marville (Airdrome No. 30).
- \*74th—Briey area.

#### Bombing Flights:

- 28th (?)—Cosnes (Airdrome No. 19).
- 29th (?)—Cosnes (Airdrome No. 19).
- 30th (?)—Cosnes (Airdrome No. 19).

#### Battle Flights:

- 2d—Autrecourt (Airdrome No. 103).
- 5th—Virton (Airdrome No. 67).
- 20th—Virton (Airdrome No. 67).
- 21st—Virton (Airdrome No. 67).
- 32d—Unlocated.
- 33d—Virton (Airdrome No. 67).
- 37th—Thonne-les-Pres (Airdrome No. 54).
- 45th—Unlocated.

#### Reconnaissance Flights:

- 29th—West of Briey (probably Briey Airdrome  
No. 16).
- 31st—Ozerailles (Airdrome No. 32).
- 39th—Jametz S. (Airdrome No. 76 S.).
- 37th—Doncourt (Airdrome No. 72).
- 44th—Unlocated.
- 46th—Briey (Airdrome No. 58).
- 47th—Unlocated.
- 203d—Jametz N. (Airdrome No. 76 N.).
- 206th—Unlocated.
- \*215th—Unlocated.
- 219th—Jametz S. (Airdrome No. 76 S.).
- 232d—Ozerailles (Airdrome No. 32).
- 246th—Briey (Airdrome No. 58).
- 273d—Longwy area.
- \*274th—Unlocated.
- 279th—Ozerailles (Airdrome No. 32).
- 280th—Longuyon (Airdrome No. 56).
- 296th—Conflans area.
- 298th—Buxieres (before the advance).

#### Mosaic Sections:

- Army Detachment C—Briey (Airdrome No. 16).

MOSELLE-VOSGES REGION.

Pursuit Flights :

- 78th—Buhl (Airdrome No. 6).
- 80th—Marimont (Airdrome No. 47).
- 84th—Frescaty (Airdrome No. 7).

Reconnaissance Flights :

- 12th—Many (Airdrome No. 11).
- 67th—Lorquin (Airdrome No. 12).
- 100th—Morhange (Airdrome No. 8).
- 199th—Bensdorf (Airdrome No. 45).
- 218th—Unlocated.
- 242d—Frescaty (Airdrome No. 7).
- 257th—Morhange (Airdrome No. 8).
- 275th—Metz area.
- 281st—Lorquin (Airdrome No. 12).

Bombing Flights :

- 25th—Boulay (Airdrome No. 61).
- 26th—Boulay (Airdrome No. 61).
- 27th—Boulay (Airdrome No. 61).

Battle Flights :

None.

Home Defense Flights :

- 1st—Bitche (Airdrome No. 107).
- 2d—Folpersweiler (Airdrome No. 60).
- 3d—Morhange (Airdrome No. 8).
- 8th—Bitche (Airdrome No. 107).

VOSGES-SWITZERLAND REGION.

Pursuit Flights :

- 69th—Habsheim (Airdrome No. 26).
- 70th—Stotzheim (Airdrome No. 89).
- 71st—Habsheim (Airdrome No. 26).
- 75th—Habsheim (Airdrome No. 26).
- 76th—Habsheim (Airdrome No. 26).

Home Defense Flights :

- 4-B—Fribourg (Airdrome No. 2).
- 5th—Neuf-Brisach (Airdrome No. 23).
- 14th—Lahr (Airdrome No. 41).
- (?)—Karlsruhe (Airdrome No. 65).

Bombing Flights :

None.

Reconnaissance Flights :

- 4th—Hagenau (Airdrome No. 55).
- 10th—Schlestadt (Airdrome No. 4).
- 43d—Schlestadt (Airdrome No. 4).
- 243d—Colmar (Airdrome No. 28).
- 267th—Habsheim (Airdrome No. 26).
- 282d—Sierenz (Airdrome No. 27).
- 289th—Habsheim (Airdrome No. 26).

Mosaic Sections :

- 4th—Altdorf (Airdrome No. 88).

Battle Flights :

None.

ACTIVITY

OUR OWN FORCES :

*Argonne to the Meuse.*—Pursuit planes active in patrolling the front and dropping bombs on towns. Four observation planes maintained liaison with the infantry and carried out reconnaissance missions. Seven enemy planes destroyed or brought down out of control. Four of our planes are missing.

*The Meuse to the Moselle.*—Two pursuit patrols. Five observation missions, taking 50 good photographs. Ten thousand propaganda leaflets were dropped telling of Austria and Turkey withdrawing. One enemy plane brought down.

ENEMY'S FORCES :

*Argonne to the Meuse.*—Visibility bad. Few patrols were made consisting of five to eight planes each. Ten adjustments were carried out. Enemy planes did a little bombing along the lines and machine-gunned our troops. Five balloons in ascension.

*The Meuse to the Moselle.*—Visibility good to fair. Forty pursuit planes and four reconnaissance planes reported during the day. One deep reconnaissance was made in the sector to the right of the Moselle. One adjustment was made, obtaining a bracket. Nine balloon ascensions. One of our balloons shot down.

DISTRIBUTION OF IDENTIFIED GERMAN AIR UNITS, NOVEMBER 6, 1918

Region.	Pursuit.		Reconnaissance.		Battle.		Bombing.	
	Nov. 5.	Nov. 6.	Nov. 5.	Nov. 6.	Nov. 5.	Nov. 6.	Nov. 5.	Nov. 6.
Flanders .....	8	8	8	9	2	2	6	6
Lys-Vimy .....	11	11	20	19	2	2	6	6
Vimy-Noyon.....	24	24	33	33	13	13	6	6
Noyon-Argonne.....	18	18	47	47	16	16	6	6
Argonne-Moselle.....	13	13	19	19	8	8	3	3
Moselle-Vosges .....	3	3	9	9	..	..	3	3
Vosges-Switzerland.....	5	5	7	7	..	..	..	..
Exterior Fronts .....	2	2	20	20	..	..	..	..
Unlocated .....	1	1	1	1	1	1	..	..
Total .....	85	85	164	164	42	42	30	30

Total identified flights (all classes) on all fronts, November 6—347.

Total estimated machines belonging to such flights—2,992.

OFFICIAL COMMUNIQUE

NOVEMBER 6, 1918.

AMERICAN.

(November 6, 1918, morning.) Between the Bar and the Meuse the First American Army continued its advance northward, opposed by strong resistance.

Our troops are in the Bois du Fond de Limon, whence the line extends through Flaba, Maisonnelle and Chemery. On the line of the Meuse, which we now hold from the Bois de l'Hospice, inclusive, to Sassey, and on the heights to the east of Milly, and thence to Dun-sur-Meuse, there was severe artillery and machine-gun fighting during the night.

Franco-American units, operating in the difficult terrain east of the Meuse against positions long held by the enemy on the front Sivry to the Bois de la Grande Montagne, are heavily engaged.

During successful air combats yesterday afternoon three additional enemy planes were brought down. All of our machines returned.

(November 6, 1918, evening.) The First American Army has made further important gains on both sides of the Meuse.

East of the Meuse our troops advanced to a depth of more than 4 kilometers. Neither the extremely difficult nature of the terrain nor the two fresh divisions hurriedly brought up by the enemy greatly delayed our progress. On the Cote St. Germain, however, the enemy defended his positions with particular obstinacy, and we were able to secure them only as a result of a bitter struggle. Near Murvaux, Hill 284 and Fontaines fell into our hands. The battle still continues, with the enemy making desperate efforts to maintain a last foothold on the heights of the Meuse which he has held since 1914.

West of the Meuse the enemy again failed to check our rapid progress. Along the river bank we took Villemontrey and Mont de Brune and reached the western outskirts of Monzon. To the west our line passes through Autrecourt and Beau Menil Farm to Connage. We have also taken Bulson, Harancourt and the important town Raucourt. Since the beginning of our attack on November 1, 22 enemy divisions have appeared on our front between the Meuse and the Argonne.

Our pursuit planes dropped a ton of explosives on several important road centers which were being used by the enemy to make his escape. Seven enemy airplanes were shot down during the day. Two of our machines are missing.

#### BRITISH.

(November 6, 1918, evening.) During the day we progressed along the whole battle front in spite of heavy and continuous rain. Sharp fighting has taken place at a number of points with German rear-guards, and some hundreds of prisoners have been taken by us. On our right our troops pushing forward have captured CARTIGNIES and MARBAIX. In the center, driving the enemy from his hastily constructed defenses on the E. bank of the SAMBRE, we have crossed the river near BERLAIMONT, and have captured LEVAL and AULNOYE, where we have taken prisoners. The important railway junction at AULNOYE is in our possession. Farther N. we have crossed the AVESNES-BAVAY road, E. of the FORET de MORMAL, and have reached the railway S. and W. of BAVAY, where sharp fighting is taking place within a short distance of the town. We have cleared the W. bank of the HONELLE as far N. as ANGRE, where there has been stiff fighting all day. In this locality the enemy is resisting our advance with determination, and has delivered two counter attacks, both of which were repulsed. On the left, Canadian troops are continuing their progress E. of the SCHELDT, and have captured Baiseux and QUIEVRECHAIN.

AVIATION. On November 5, in spite of low clouds and continuous rain, our machines in the battle area, flying at a height of about 100 feet, actively co-operated with our advancing troops, bringing back valuable information as to their movements and reconnoitering the positions held by the enemy. The roads congested with traffic and infantry in close order were attacked with machine-gun fire and bombs, and great confusion and heavy casualties were seen to be caused. Over 8 1/2 tons of bombs were dropped during these operations. There was practically no activity on the part of the enemy in the air. One hostile airplane, which was encountered, was shot down out of control. Three of our machines are missing. No night operations were possible on account of weather conditions.

SUMMARY OF AIR INFORMATION

CHANGE IN LOCATIONS OF UNITS

ARGONNE-MOSELLE REGION.

293rd Reconnaissance Flight..    Woevre, with Det. Army C.    Sept. 26.    Last identified in Vimy-Noyon region  
Document, French source.....    Sept. 6, 1918.

NOTE.—Owing to the American advance, the 2nd Battle Flight (last identified at Autrecourt) and the 3rd Army Aircraft Park (last identified at Mouzon N.) are considered as unlocated in the Argonne-Moselle region.

IDENTIFICATIONS

NOYON-ARGONNE REGION.

53rd Pursuit Flight.....    With 3rd German Army.    Sept. 28.    Last identified at Couvron (same region ,  
Document, French source.....    Aug. 23, 1918.  
233rd Reconnaissance Flight..    With 3rd German Army.    Sept 21.    Doc-    Last identified at Mars-sous-Bourcq  
ument, French source.....    (same region), Aug. 10, 1913.  
240th Reconnaissance Flight..    With 7th German Army.    Sept 26.    Doc-    Last identified in same region, Aug, 25,  
ument, French source.....    1918.  
260th Reconnaissance Flight..    With 7th German Army.    Sept. 27.    Doc-    Last identified in Sissonne area (same  
ument, French source.....    region), Aug. 27, 1918.

AIRDROMES

NOYON-ARGONNE REGION.

Changes in Accommodation.				Present Accommodation.		
Hangars.    Sheds.    Capacity.				Hangars.	Sheds.	Capacity.
1. Confirmed airdromes now in Allied territory or too close to the line to be used :						
418.    Haution .....	—6	..	—12	..	..	..
416.    La Valle-aux-Bleds .....	—10	..	—20	..	..	..
402.    Lucquy .....	—6	..	—12	..	..	..
422.    Montcornet .....	?	?	?	..	..	..
403.    Remaucourt .....	..	—1	—6	..	..	..
428.    Seraincourt .....	—24	..	—24	..	..	..
421.    Solmont .....	—8	..	—16	..	..	..

2. Reported airdromes now in allied territory or too close to the line to be used :

2502.    Bucy.  
2529.    Mainbressy.  
2503.    Morgny.  
2501.    Novion-Porcien.  
2504.    Plomion.  
2505.    St. Algis.  
2530.    Voulpaix.  
2522.    Wassigny.

ARGONNE-MOSELLE REGION.

1. Change in existing airdrome :						
109.    Carignan .....	+8	..	+16	12	..	24
Increase since 21-8-18.    Airdrome is occupied by scouts.    U. S. photo. 4-11-18.						
2. Confirmed airdromes now in Allied territory or too close to the line to be used :						
103.    Autrecourt .....	..	—6	—64	..	..	..
105.    Bulson.....	—8	..	—12	..	..	..
91.    Malmy .....	—18	..	—18	..	..	..
9.    Martincourt.....	—6	..	—12	..	..	..
75.    Mouzon .....	—12	—7	—64	..	..	..
3. Reported airdromes now in Allied territory or too close to the line to be used :						
2172.    Carignan West. 2105.    Douzay. 2104.    Villers.						

MOSELLE-VOSGES REGION.

1. Change in existing airdrome :						
49.    Montoy .....	+12	..	+24	13	3	48
Increase since 22-8-18.    British photo. 3-11-18.						
2. Photograph of the following airdrome shows no change :						
98.    Hattigny.....	..	..	..	16	..	34
British photo. 3-11-18.						

ENEMY AIR ORDER OF BATTLE, NOVEMBER 7, 1918

Same as published in SUMMARY OF AIR INFORMATION No. 98, with the exception of the 2nd Battle Flight, which s now unlocated in the Argonne-Moselle region, and of the addition of the 293 rd Reconnaissance Flight in the same region (airdrome unknown).

ACTIVITY

OUR OWN FORCES :

Argonne to the Meuse.—Unfavorable weather prevented operations. Two planes reported missing yesterday have since returned.  
The Meuse to the Moselle.—Nil.

## ENEMY'S FORCES :

*Argonne to the Meuse.*—Visibility impossible. Activity nil.

*The Meuse to the Moselle.*—Visibility poor to impossible. Twenty-eight pursuit planes reported in the Sector to the left of La Chaussee. Fifty planes whose types it was impossible to identify, were reported between LA CHAUSSEE and PORT-SUR-SEILLE. One balloon ascension.

General Impression.—Quiet.

## DISTRIBUTION OF IDENTIFIED GERMAN AIR UNITS, NOVEMBER 7, 1918

Region.	Pursuit.		Reconnaissance.		Battle.		Bombing.	
	Nov. 6.	Nov. 7.	Nov. 6.	Nov. 7.	Nov. 6.	Nov. 7.	Nov. 6.	Nov. 7.
Flanders .....	8	8	9	9	2	2	6	6
Lys-Vimy .....	11	11	19	19	2	2	6	6
Vimy-Noyon.....	24	24	33	32	13	13	6	6
Noyon-Argonne.....	18	18	47	47	16	16	6	6
Argonne-Moselle .....	13	13	19	20	8	8	3	3
Moselle-Vosges .....	3	3	9	9	..	..	3	3
Vosges-Switzerland.....	5	5	7	7	..	..	..	..
Exterior Fronts .....	2	2	20	20	..	..	..	..
Unlocated .....	1	1	1	1	1	1	..	..
Total .....	85	85	164	164	42	42	30	30

Total identified flights (all classes) on all fronts Nov. 7—347.

Total estimated machines belonging to such flights—2,992.

## 2nd BOMBING SQUADRON

(FROM R. A. F. SUMMARY OF AIR INTELLIGENCE, NOVEMBER 5, 1918).

Under date, 16th October, it is reported that a bombing squadron was expected to arrive at BOURLERS (South of CHIMAY) from BLISSY (S. E. of HIRSON).

This report may refer to the 2nd Bombing Squadron, which must have left the CLERMONT-LES-FERMES area some time ago, owing to the proximity to the line of those airdromes, and may have gone temporarily to BLISSY.

## REPORTED MOVEMENTS OF ARMY AIRCRAFT PARKS

It has been reported that the 7th Army Aircraft Park was recently at BOURLERS but left there for CLAVIER (S. E. of HUY) on Oct. 20th.

The Army Aircraft Park of the Army Detachment C, last identified at FRESCATY (S. of METZ) has been reported to have moved to THIONVILLE. (Confirmation required).

SUMMARY OF AIR INFORMATION

CHANGE IN LOCATIONS OF UNITS

VIMY-NOYON REGION.

293d (Bav.) Reconnaissance Flight... With 17th German Army... October 27..... Document, R. A. F.  
Last identified in Argonne-Moselle region, September 26, 1918.  
Identification in Argonne-Moselle region may have been incorrect as this flight was identified in the Vimy-Noyon region, September 6, 1918.

IDENTIFICATIONS

Nil.

AIRDROMES

MOSELLE-VOSGES REGION.

Changes in accommodation.				Present accommodation.		
Hangars.	Sheds.	Capacity.		Hangars.	Sheds.	Capacity.
1. Changes in existing airdromes :						
7. Frescaty .....	—2	..	—4	19	5	144
Decrease since October 9, 1918. British photo, October 23, 1918.						
8. Morhange .....	+2	..	+4	9	4	42
Increase since September 16, 1918. British photo, November 5, 1918.						

ENEMY AIR ORDER OF BATTLE, NOVEMBER 8, 1918

The same as published in SUMMARY OF AIR INFORMATION No. 98, with the exception of the 2d Battle Flight, which is now unlocated in the Argonne-Moselle region.

ACTIVITY

OUR OWN FORCES :

*Argonne to the Meuse.*—Fog and rain made night flying impossible, while clouds practically all day interfered with our usual operations. Pursuit planes patrolled the region east of the Meuse and brought back reports of enemy movements and concentrations. Observation planes carried out a number of usual reconnaissance and infantry contact missions at low altitudes. Roads and villages were attacked repeatedly with machine guns and bombs. Over a thousand pounds of explosives were dropped on the region of Baalon, Remoiville and Brandeville, including the ammunition dump at Gibercy, which was seen to explode. Three enemy planes and four balloons were shot down during the day. One of our planes is missing.

*The Meuse to the Moselle.*—Bad weather conditions prevented much activity on the part of our aviation. One pursuit patrol, four visual reconnaissances and one artillery adjustment were executed during the day.

ENEMY'S FORCES :

*Argonne to the Meuse.*—Visibility very poor. Only a few patrols were reported in the region between Stenay and Damvillers. They showed little desire to attack our planes. Six balloons were reported in ascension.

General Impression.—Very little activity.

*Meuse to the Moselle.*—Visibility very poor. Slight activity of pursuit aviation. Seven reconnaissance planes were observed, principally east of Lake Lachaussee and in the vicinity of the Moselle. Two adjustments were attempted. Only three balloons were reported in ascension.

General Impression.—Slight.

DISTRIBUTION OF IDENTIFIED GERMAN AIR UNITS, NOVEMBER 8, 1918

Region.	Pursuit.		Reconnaissance.		Battle.		Bombing.	
	Nov. 7.	Nov. 8.	Nov. 7.	Nov. 8.	Nov. 7.	Nov. 8.	Nov. 7.	Nov. 8.
Flanders .....	8	8	9	9	2	2	6	6
Lys-Vimy .....	11	11	19	19	2	2	6	6
Vimy-Noyon .....	24	24	32	33	13	13	6	6
Noyon-Argonne .....	18	18	47	47	16	16	6	6
Argonne-Moselle .....	13	13	20	19	8	8	3	3
Moselle-Vosges .....	3	3	9	9	..	..	3	3
Vosges-Switzerland .....	5	5	7	7	..	..	..	..
*Unlocated .....	3	3	21	21	1	1	..	..
Total .....	85	85	164	164	42	42	30	30

Total identified flights (all classes) on all fronts, November 8—347.

Total estimated machines belonging to such flights—2,992.

\*Flights previously reported on exterior fronts are now carried as unlocated.

SUMMARY OF OFFICIAL COMMUNIQUÉS

NOVEMBER 8, 1918.

AMERICAN.

(November 8, 1918, morning.) On both sides of the MEUSE the night was marked by heavy machine gun fighting and sniping. There was heavy artillery fire in the region of SEDAN and east of the MEUSE.

## SUMMARY OF AIR INFORMATION, No. 100, NOVEMBER 9, 1918.

(November 8, 1918, evening.) This afternoon French and American units operating under the command of the First American Army wrested from the enemy his last hold on the heights east of the MEUSE, memorable as the scene of the great battle of VERDUN in 1916, and drove him back into the low lands of the WOEVRE.

On a front of 14 kilometers we advanced to a depth of 6 kilometers, taking LISSEY, ECUREY, BRECHEVILLE, PEUVILLERS, DAMVILLERS, FLABAS, and other towns and villages.

Along the line of the MEUSE from VILLEFRANCHE to WADELINCOURT lively artillery and machine-gun combats have taken place during the day. Six additional guns of heavy caliber, many more machine guns, 2,000 rifles, and a large airplane workshop, captured during our advance west of the MEUSE, have been reported.

In the WOEVRE, on the front of the Second American Army, our patrols were very active, capturing prisoners in the course of several successful enterprises near Lake LA CHAUSSEE.

Despite adverse weather conditions, our aviators, flying at a height of 100 meters, carried out a number of reconnaissance missions. They bombed and machine-gunned concentrations of enemy troops in the region of BAALON and REMOIVILLE and blew up an ammunition dump at GIBERCY. Four enemy balloons were destroyed and three enemy airplanes were shot down during the day. One of our planes is missing.

### FRENCH.

(November 8, 1918, morning.) The advance was resumed this morning on the entire front. Advanced elements reached LIART, 30 kilometers N. of RETHEL, further to the right we seized SINGLY and FRENOIS this morning before day-break and have entered the suburbs of SEDAN. The number of prisoners which we took yesterday exceeds 1,500, and the captured matériel is increasing considerably.

(November 8, 1918, 9 p. m.) Our troops continued the pursuit of the enemy's rear-guards and freed a large area of French territory with many inhabitants. On our left we made marked progress E. of the road from LA CAPELLE to AVESNES and advanced our lines to the outskirts of HIRSON FORT. Further E. we reached the S. bank of the THON at many points between ORIGNY and LIART. In spite of the heavy resistance offered by the enemy we succeeded in establishing bridge-heads on the N. bank. On our right we have reached the MEUSE from MEZIERES to a point on a level with BAZEILLES. The number of prisoners taken since yesterday exceeds 2,000. The enemy is abandoning guns and matériel everywhere. No aviation report.

### BRITISH.

(November 8, 1918, morning.) There was sharp fighting yesterday evening in the neighborhood of ECLAIBES and LIMONT-FONTAINE, S. of HAUTMONT. These villages were captured by our troops together with a number of prisoners. Our advance S. of the MONS-CONDE Canal continued.

(November 8, 1918, evening.) Despite very difficult weather conditions our troops, advancing in driving rain, have made substantial progress on the front S. of the MONS-CONDE Canal. On the right we have captured AVESNES and have passed the line of the AVESNES-MAUBEUGE road, both N. and S. of that town. In the center we have cleared HAUTMONT and are approaching the railway W. of MAUBEUGE. On the left we have taken MALPLAQUET, FAYT-LE-FRANC, DOUR and THULIN and are advancing along the MONS-CONDE Canal. Further N., his flank threatened by our advance on the battle front, the enemy has commenced to withdraw S. of TOURNAI. We have captured CONDE and, crossing the SCHELDT Canal S. of the town of ANTOING, have taken the villages of LA PLAIGNE and BELLOY. We hold the Western portion of TOURNAI. Since November 1 we have captured about 18,000 prisoners and several hundred guns.

### ITALIAN.

(November 8, 1918, 3.37 p. m.) There are no war events to be reported on the Italian front. The execution of the conditions of the armistice is proceeding.

### GERMAN.

(November 8, 1918, 1.18 p. m.) WESTERN FRONT. French troops who had again gained a footing on the E. bank of the SCHELDT N. W. of AUDENARDE, were thrown back across the river by counter-attack. Between the SCHELDT and the MEUSE we carried out our movements last night according to plan. Rearguard actions developed in front of our new lines, S. of the road from VALENCIENNES to MONS on the SAMBRE N. of AVESNES, and on the MEUSE heights S. W. of SEDAN this fighting developed to a larger scale. The combats closed at all points with the repulse of the enemy. By evening the enemy was on a line E. of LA CAPELLE—S. W. of HIRSON—S. of SIGNY-L'ABBAYE, near POIX-TERRON and on the MEUSE heights S. W. of SEDAN. E. of the MEUSE combats occurred in the forests W. of BRANDEVILLE.

(November 8, 1918, 7.30 p. m) The day was quiet on the Western Front.

SUMMARY OF AIR INFORMATION

CHANGE IN LOCATIONS OF UNITS

NOYON-ARGONNE REGION.

On account of the Allied advance, the 1st Bombing Squadron (1st, 2d and 3d Flights), last identified at Anor, is now carried as unlocated in the Noyon-Argonne region.

ARGONNE-MOSELLE REGION.

On account of the recent Allied advance, the 36th, 203d and 219th Reconnaissance Flights, last identified at Jametz, are now carried as unlocated in the Argonne-Moselle region.

IDENTIFICATIONS

Nil.

AIRDROMES

NOYON-ARGONNE REGION.

Change in accommodation:			Present accommodation:		
Hangars.	Sheds.	Capacity.	Hangars.	Sheds.	Capacity.
1. Confirmed airdromes now in Allied territory or too close to the line to be used:—					
407. Clairfontaine .....	—2	..	—4	..	..
420. Etreaumont .....	—6	..	—12	..	..
401. Fournies .....	—1	..	—2	..	..
413. La Capelle .....	—7	..	—14	..	..
414. La Capelle W.....	—2	..	—4	..	..
419. La Bouteille .....	—15	..	—30	..	..
412. Landouzy .....	—9	—2	—26	..	..
415. Papleux .....	—4	..	—8	..	..
406. Sapogne .....	—34	..	—68	..	..
405. Villers-sur-le-mont .....	—6	..	12	..	..

2. Reported airdromes now in Allied territory or too close to the line to be used:—

- 2524. Aubigny.
- 2527. Auge.
- 2528. Brunehamel.
- 2519. Faissault.
- 2517. Flize.
- 2534. Grandes Rubrique.
- 2521. La Fosse-a-l'Eau.
- 2520. Launois.
- 2525. Les Olivieres.
- 2515. Mezieres.
- 2514. Mondrepuis.
- 2523. Signy.
- 2533. Thin-le-Moutier.

ARGONNE-MOSELLE REGION.

1. New airdromes:—

9. Fleville.....	+3	..	+9	3	..	7
6 km. W. of Briey. Unoccupied.	U. S. photo, November 5, 1918.					
13. Lubey .....	+2	..	+4	2	..	4
5 km. W. of Briey. Unoccupied.	U. S. photo, November 5, 1918.					
10. Maraumont .....	+10	..	+30	10	..	30
3 km. S. W. of Briey. Occupied.	U. S. photo, November 5, 1918.					

2. Change in existing airdromes.

58. Briey N .....	—6	..	—12	7	1	8
Decrease since September 26, 1918.	U. S. photo, November 5, 1918.					

3. Photographs of the following airdromes show no change in accommodation:—

29. Anoux .....	..	..	8	..	16
Two hangars have been moved to another part of the field.	U. S. photo, November 5, 1918.				
16. Briey .....	..	..	4	..	10
U. S. photo, November 5, 1918.					
102. Lixieres.....	..	..	6	..	12
U. S. photo, November 5, 1918.					

4. Airdrome vacated:—

119. Mance .....	—4	..	—8	..	..
U. S. photo, November 5, 1918.					

MOSELLE-VOSGES REGION.

1. Photographs of the following airdromes show no change in accommodation:—

6. Bühl .....	..	..	38	6	113
British photo, November 6, 1918.					
12. Lorquin .....	..	..	21	..	42
British photo, November 6, 1918.					

ENEMY AIR ORDER OF BATTLE, NOVEMBER 9, 1918

NOYON-ARGONNE REGION.

Latest identifications show that there are 18 pursuit, 47 reconnaissance, 16 battle, 6 bombing and 1 Giant flight in this region, but owing to the recent Allied advances, they are all unlocated at the present time, with the exception of the following flights :



*Reconnaissance Flights*

231st—Marlemont.  
286th—Marlemont.

*Giant Flight.*

300th—Morville.

## ARGONNE-MOSELLE REGION.

*Pursuit Flights*

4th—Marville (Airdrome No. 30).  
6th—Marville (Airdrome No. 30).  
10th—Marville (Airdrome No. 30).  
11th—Marville (Airdrome No. 30).  
12th—Unlocated.  
13th—Unlocated.  
15th—Unlocated.  
18th—Bruville area (probably Conflans Airdrome No. 72).  
19th—Unlocated.  
64th—Mars-la-Tour (before the advance).  
65th—Mars-la-Tour (before the advance).  
67th—Marville (Airdrome No. 30).  
74th—Briey area.

*Bombing Flights :*

28th (?)—Cosnes (Airdrome No. 19).  
29th (?)—Cosnes Airdrome No. 19).  
29th (?)—Cosnes Airdrome No. 19).

*Battle Flights :*

2d—Unlocated.  
5th—Virton (Airdrome No. 67).  
20th—Virton (Airdrome No. 67).  
21st—Virton (Airdrome No. 67).  
32d—Unlocated.  
33d—Virton (Airdrome No. 67).  
37th—Thonne-les-Pres (Airdrome No. 54).  
45th—Unlocated.

*Reconnaissance Flights :*

29th—West of Briey (probably Briey Airdrome No. 16).  
31st—Ozerailles (Airdrome No. 32).  
\*36th—Unlocated.  
37th—Doncourt (Airdrome No. 72).  
44th—Unlocated.  
46th—Briey (Airdrome No. 58).  
47th—Unlocated.  
203d—Unlocated.  
206th—Unlocated.  
215th—Unlocated.  
\*219th—Unlocated.  
232d—Ozerailles (Airdrome No. 32).  
246th—Briey (Airdrome No. 58).  
273d—Longwy area.  
\*274th—Unlocated.  
279th—Ozerailles (Airdrome No. 32).  
280th—Longuyon (Airdrome No. 56).  
296th—Conflans area.  
298th—Buxieres (before the advance).

*Mosaic Sections :*

Army Detachment C—Briey (Airdrome No. 16).

## MOSELLE-VOSGES REGION.

*Pursuit Flights :*

78th—Buhl (Airdrome No. 6).  
80th—Marimont (Airdrome No. 47).  
84th—Frescaty (Airdrome No. 7).

*Reconnaissance Flights :*

12th—Many (Airdrome No. 11).  
67th—Lorquin (Airdrome No. 12).  
100th—Morhange (Airdrome No. 8).  
199th—Bensdorf (Airdrome No. 45).  
218th—Unlocated.  
242d—Frescaty (Airdrome No. 7).  
257th—Morhange (Airdrome No. 8).  
275th—Metz area.  
281st—Lorquin (Airdrome No. 12).

*Bombing Flights :*

25th—Boulay (Airdrome No. 61).  
26th—Boulay (Airdrome No. 61).  
27th—Boulay (Airdrome No. 61).

*Battle Flights :*

None.

*Home Defense Flights :*

1st—Bitche (Airdrome No. 107).  
2d—Folpersweiler (Airdrome No. 60).  
3d—Morhange (Airdrome No. 8).  
8th—Bitche (Airdrome No. 107).

## VOSGES-SWITZERLAND REGION.

*Pursuit Flights :*

69th—Habsheim (Airdrome No. 26).  
70th—Stotzheim (Airdrome No. 89).  
71st—Habsheim (Airdrome No. 26).  
75th—Habsheim (Airdrome No. 26).  
76th—Habsheim (Airdrome No. 26).

*Home Defense Flights :*

4-B—Fribourg (Airdrome No. 2).  
5th—Neuf-Brisach (Airdrome No. 23).  
14th—Lahr (Airdrome No. 41).  
(?)—Karlsruhe (Airdrome No. 65).

*Bombing Flights :*

None.

*Reconnaissance Flights :*

4th—Hagenau (Airdrome No. 55).  
10th—Schlestadt (Airdrome No. 4).  
43d—Schlestadt (Airdrome No. 4).  
243d—Colmar (Airdrome No. 28).  
267th—Habsheim (Airdrome No. 26).  
282d—Sierentz (Airdrome No. 27).  
289th—Habsheim (Airdrome No. 26).

*Mosaic Sections :*

4th—Altdorf (Airdrome No. 88).

*Battle Flights :*

None.

\*Flights in which change in locations has occurred.

## ACTIVITY

## OUR OWN FORCES :

*Argonne to the Meuse.*—In spite of unfavorable weather conditions, a number of missions were carried out by our corps reconnaissance planes. They also dropped a few bombs and machine-gunned troops and wagons on the roads in the vicinity of Montmedy.

*The Meuse to the Moselle.*—One low reconnaissance was made over Chambley and Mars-la-Tour.

## ENEMY'S FORCES :

*Argonne to the Meuse.*—Visibility bad. During the night of November 8-9 a few bombs were dropped on Brandeville. Activity was slight along the entire front.

*The Meuse to the Moselle.*—Visibility poor to impossible. There was no activity reported in this sector.

**DISTRIBUTION OF IDENTIFIED GERMAN AIR UNITS, NOVEMBER 9, 1918**

Region.	Pursuit.		Reconnaissance.		Battle.		Bombing.	
	Nov. 8.	Nov. 9.	Nov. 8.	Nov. 9.	Nov. 8.	Nov. 9.	Nov. 8.	Nov. 9.
Flanders .....	8	8	9	9	2	2	6	6
Lys-Vimy .....	11	11	19	19	2	2	6	6
Vimy-Noyon .....	24	24	33	33	13	13	6	6
Noyon-Argonne .....	18	18	47	47	16	16	6	6
Argonne-Moselle .....	13	13	19	19	8	8	3	3
Moselle-Vosges .....	3	3	9	9	..	..	3	3
Vosges-Switzerland .....	5	5	7	7	..	..	..	..
Unlocated .....	3	3	21	21	1	1	..	..
Total .....	85	85	164	164	42	42	30	30

Total identified flights (all classes) on all fronts, November 9—347.

Total estimated machines belonging to such flights—2,992.

**GERMAN AIRDROME ACCOMMODATION FROM ARGONNE TO SWISS BORDER, NOVEMBER 2 AND NOVEMBER 9, 1918**

Region.	Airdromes.		Hangars.		Sheds.		Capacity.	
	Nov. 2.	Nov. 9.	Nov. 2.	Nov. 9.	Nov. 2.	Nov. 9.	Nov. 2.	Nov. 9.
Argonne-Moselle .....	42	36	283	248	72	50	999	797
Moselle-Vosges .....	40	40	273	285	79	79	1,205	1,229
Vosges-Switzerland .....	32	32	265	265	103	103	1,357	1,357
Total .....	114	108	821	798	254	232	3,561	3,383

**OFFICIAL COMMUNIQUEES**

NOVEMBER 9, 1918.

**AMERICAN.**

(November 9, 1918, morning.) East of the Meuse, in the region north and south of Damvillers, our advance successfully continues, meeting strong resistance from machine-gun fire.

Along the line of the Meuse, from Sassey to Wadelincourt, the night was marked by artillery and machine-gun fighting.

(November 9, 1918, evening.) Opposed by machine-gun fire from retreating hostile rearguards, troops of the First American Army, in co-operation with French units serving under the same command, gained additional important areas east of the Meuse today.

Crossing the river south of Stenay, our troops captured Mouzay. Pushing rapidly through the Forêt de Woevre from the west and southwest, they converged on Jametz, 13 kilometers east of the Meuse, which, with Louppy-sur-Loison and Remoiville, was taken.

On the front south of Damvillers, Moirey, Chaumont and Manheulles, though vigorously defended, fell before our advance.

Despite heavy rains and mist, our aviators executed reconnaissance missions, and successfully bombed and machine-gunned enemy troops in the vicinity of Montmedy.

**FRENCH.**

(November 9, 1918, morning.) Artillery and machine-gun activity occurred during the night at several points on the front.

This morning our troops resumed their advance on the entire line.

(November 9, 1918, evening.) Our troops continue their advance and have progressed 15 kilometers at certain points in the course of the day.

On the left our cavalry units crossed the Belgian frontier, driving in the enemy rear-guards, taking prisoners, and seizing guns and a large quantity of matériel, notably several railway trains.

GLAGEONS, FOURMIES, HIRSON, ANOR and ST. MICHEL were occupied by us.

Our elements continue the pursuit beyond these localities on the general line MOMIGNIES-N. edge of the Forest of ST. MICHEL—MACQUENOISE—FORGE-PHILLIPE.

Further E., after forcing the passage of the THON and the AUBE and clearing the plateaus on the N. of these two rivers, in spite of a strenuous resistance on the part of the enemy, we took SIGNY-le-PETIT and have passed some distance beyond it. We reached the MEZIERES-HIRSON railway and the village of WAGNY, S. of MAUBERT-FONTAINE.

On the right our line follows the course of the SORMONNE. We have reached and surrounded MEZIERES, MOHON, and crossed the MEUSE further to the height of LUMES.

(November 7, 1918.) ARMY OF THE ORIENT. On the DANUBE between BAZIAS and SEMLIN and on the SAVE between SEMLIN and MITROVITZ the Serbian troops gained a footing on the N. bank, after having broken down the resistance of the German forces. The latter withdrew, destroying the bridges over the DANUBE at NEUSATZ. The Serbians are in pursuit towards the N. and are being welcomed as liberators by the population. Many freed prisoners who came to rejoin them in BOSNIA have reached VISEGRAD and are marching on SARAJEVO. At the call of the local Yougo-Slav Government S. of VISEGRAD, they have occupied PRIBOJ.

**BRITISH.**

(November 9, 1918, morning.) The fortress of MAUBEUGE has been captured by the Guards and 62d Divisions. Our troops have made good progress S. of that town and are well E. of the AVESNES-MAUBEUGE Road. Between MAUBEUGE and the MONS-CONDE Canal our advance also continues. Between the SCHELDT and the ANTOING Canal we are pushing towards PERUWELS. N. of TOURNAI we are established on the E. bank of the SCHELDT, near HERRINES and BERCHEM.

(November 9, 1918, evening.) On the whole British front our troops are moving forward, the enemy retreating rapidly before. On the right, the Fourth and the Third Armies are advancing on both sides of the SAMBRE River towards the Belgian frontier, meeting with little organized resistance. In the center the First Army has made rapid progress astride the MONS-CONDE Canal. S. of the canal, our troops have crossed the MAUBEUGE-MONS railway, and are approaching MONS. N. of the MONS-CONDE Canal, the left of the First Army, in conjunction with the right divisions of the Fifth Army, have cleared the area of the SCHELDT River and the ANTOING Canal, capturing PERUWELS, and have crossed the ANTOING Canal S. of that town. On the left, the Fifth and Second Armies have gained the E. bank of the SCHELDT on the whole front. Troops of the Fifth Army have taken ANTOING and TOURNAI, and have made progress to the E. of those towns. Further N. the Second Army is approaching RENAIX.

AVIATION. On November 8, low clouds and continuous rain greatly curtailed flying operations. Some valuable low reconnaissance work was completed, the enemy's movements being observed and reported. Nearly three-quarters of a ton of bombs were dropped on the enemy's troops and transports. No hostile machines were seen during the day. One of our machines is missing. At night the weather improved slightly and some of our night-flying machines were able to attack important railway centers, dropping over 11 1/2 tons of bombs with good effect. All these machines have returned.

**BELGIAN.**

(November 8, 1918.) Artillery on both sides was active. Detachments of our infantry have crossed the SCHELDT on the outskirts of BECKE.

SUMMARY OF AIR INFORMATION, NO. 101, NOVEMBER 10, 1918.

(November 9, 1918.) The Belgian troops reached the GHENT Canal at TERNEUZEN, from the Dutch frontier to the GHENT station.

The troops of the French Army in Belgium, progressing beyond the SCHELDT, were able despite a spirited resistance to occupy WELDEN, EDELAERE, MELDEN and the N. part of POTTES, of which the S. part has been occupied by the British troops.

E. of MELDEN the heights of KOPPONBERG were captured.

ITALIAN.

(November 9, 1918, evening.) Movements are in progress to consolidate the right bank of the Isonzo and to occupy all the bridges. One of our airships, escorted by scout planes, flew over TRENT, dropping messages.

Our troops, received everywhere with the greatest enthusiasm by the population, continue the movements incident to the armistice. RESCHEN Pass was occupied yesterday. Reports reaching the higher command confirm the magnificent dash and valor shown by all our troops of every corps and service. The following have been announced for the honor of being particularly mentioned: The Alpine Battalion Pieve di Cadore, Exilles, the 11th Bersaglieri Cyclist Battalion, The Lanres Regiment of Mantova, and the 7th Squadron of armored machine-gun motor-cars.

GERMAN.

(November 9, 1918, 12.10 p. m.) WESTERN FRONT. The part of TOURNAI lying on the W. bank of the SCHELDT was evacuated by us and occupied by the British.

Between the SCHELDT and the OISE and W. of the MEUSE we have withdrawn our lines according to plan, in the course of which rear-guard actions developed. In these sectors the enemy has reached the line PERUWELS-W. of ST. GHISLAIN-W. of MAUBEUGE-E. and S. E. of AVESNES. W. of the MEUSE he followed us up to the line LIART-WARBY and along the MEUSE, W. of SEDAN.

Local combats are continuing on the E. bank of the MEUSE.

(November 9, 1918, 6.31 p. m.) The day was quiet on the Western Front.

SUMMARY OF AIR INFORMATION

CHANGE IN LOCATIONS OF UNITS

NOYON-ARGONNE REGION.

On account of the Allied advance, the 231st and 286th Reconnaissance Flights, last identified at Marlemont, are now carried as unlocated in the Noyon-Argonne region.

ARGONNE-MOSELLE REGION.

The 1st Pursuit Squadron (Richthofen), and the 67th Pursuit Flight, last identified at Marville, are now carried as unlocated in the Argonne-Moselle region, on account of the Allied advance.

IDENTIFICATIONS

ARGONNE-MOSELLE REGION.

65th Pursuit Flight .....	Conflans .....	November 9.....	Prisoner's statement.
Last identified at Mars-la-Tour (same region), September 13, 1918.			American source.
206th Reconnaissance Flight ....	Conflans area .....	September 15 .....	Document, R. A. F.
Last identified in same area (airdrome unknown), September 8, 1918.			
46th Bavarian Reconnaissance Flight..	Briey.....	November 10.....	Prisoner's statement,
Last identified at same place October 25, 1918.			American source.

AIRDROMES

ARGONNE-MOSELLE REGION.

1. Airdromes now in Allied territory or too close to the line to be used :			Change in accommodation.			Present accommodation.		
			Hangars.	Sheds.	Capacity.	Hangars.	Sheds.	Capacity.
76.	Jametz .....	—10	—4	—32	..	..	..	..
30.	Marville .....	—16	—9	—60	..	..	..	..

ENEMY AIR ORDER OF BATTLE, NOVEMBER 10, 1918

NOYON-ARGONNE REGION.

Latest identifications show that there are 18 pursuit, 47 reconnaissance, 16 battle, 6 bombing and 1 Giant flight in this region, but owing to the recent Allied advances, they are all unlocated at the present time, with the exception of the following flight :

Giant Flight :  
300th—Morville.

ARGONNE-MOSELLE REGION.

Pursuit Flights :	Reconnaissance Flights :
*4th—Unlocated.	29th—West of Briey (probably Briey Airdrome No. 16).
*6th—Unlocated.	31st—Ozerailles (Airdrome No. 32).
*10th—Unlocated.	36th—Unlocated.
*11th—Unlocated.	37th—Doncourt (Airdrome No. 72).
12th—Unlocated.	44th—Unlocated.
13th—Unlocated.	46th—Briey (Airdrome No. 58).
15th—Unlocated.	47th—Unlocated.
18th—Bruville area (probably Conflans Airdrome No. 72).	203d—Unlocated.
19th—Unlocated.	*206th—Conflans area.
64th—Mars-la-Tour (before the advance)	215th—Unlocated.
*65th—Conflans (Airdrome No. 72).	2119th—Unlocated.
*67th—Unlocated.	232d—Ozerailles (Airdrome No. 32).
74th—Briey area.	246th—Briey (Airdrome No. 58).
Bombing Flights :	273d—Longwy area.
28th (?)—Cosnes (Airdrome No. 19).	274th—Unlocated.
29th (?)—Cosnes (Airdrome No. 19).	279th—Ozerailles (Airdrome No. 32).
30th (?)—Cosnes (Airdrome No. 19).	280th—Longuyon (Airdrome No. 56).
Battle Flights :	296th—Conflans area.
2d—Unlocated.	298th—Buxieres (before the advance).
5th—Virton (Airdrome No. 67).	Mosaic Sections :
20th—Virton (Airdrome No. 67).	Army Detachment C—Briey (Airdrome No. 16).
21st—Virton (Airdrome No. 67).	
32d—Unlocated.	
33d—Virton (Airdrome No. 67).	
37th—Thonne-les-Pres (Airdrome No. 54).	
45th—Unlocated.	

MOSELLE-VOSGES REGION.

Pursuit Flights :	Bombing Flights :
78th—Buhl (Airdrome No. 6).	25th—Boulay (Airdrome No. 61).
80th—Marimont (Airdrome No. 47).	26th—Boulay (Airdrome No. 61).
84th—Frescaty (Airdrome No. 7).	27th—Boulay (Airdrome No. 61).
Reconnaissance Flights :	Battle Flights :
12th—Many (Airdrome No. 11).	None.
67th—Lorquin (Airdrome No. 12).	Home Defense Flights :
100th—Morhange (Airdrome No. 8).	1st—Bitche (Airdrome No. 107).
199th—Bensdorf (Airdrome No. 45).	2d—Folpersweiler (Airdrome No. 60).
	3d—Morhange (Airdrome No. 8).
	8th—Bitche (Airdrome No. 107).

\*Flights in which change in locations has occurred.

218th—Unlocated.  
 242d—Frescaty (Airdrome No. 7).  
 257th—Morhange (Airdrome No. 8).  
 275th—Metz area.  
 281st—Lorquin (Airdrome No. 12).

## VOSGES-SWITZERLAND REGION.

*Pursuit Flights :*

60th—Habsheim (Airdrome No. 26).  
 70th—Stotzheim (Airdrome No. 89).  
 71st—Habsheim (Airdrome No. 26).  
 75th—Habsheim (Airdrome No. 26).  
 76th—Habsheim (Airdrome No. 26).

*Home Defense Flights :*

4-B—Fribourg (Airdrome No. 2).  
 5th—Neuf-Brisach (Airdrome No. 23).  
 14th—Lahr (Airdrome No. 41).  
 (?)—Karlsruhe (Airdrome No. 65).

*Bombing Flights :*

None.

*Reconnaissance Flights :*

4th—Hagenau (Airdrome No. 55).  
 10th—Schlestadt (Airdrome No. 4).  
 43d—Schlestadt (Airdrome No. 4).  
 243d—Colmar (Airdrome No. 28).  
 267th—Habsheim (Airdrome No. 26).  
 282d—Sierent (Airdrome No. 27).  
 289th—Habsheim (Airdrome No. 26).

*Mosaic Sections :*

4th—Altdorf (Airdrome No. 88).

*Battle Flights :*

None.

## ACTIVITY

## OUR OWN FORCES :

*Argonne to the Meuse.*—Weather conditions prevented operations during the night and morning. Corps observation planes carried out a few missions late in the day. Army observation planes carried out missions over Sedan, Carignan, Longuyon, Etain, Stenay, Monzon, Marville, Jametz, and Spincourt. During the course of operations planes dropped 1,240 pounds of bombs on Etain, Villers-les-Mangiennes, and St. Laurent. Two enemy planes were brought down. Two of our machines are missing.

*The Meuse to the Moselle.*—Four pursuit patrols. Ten visual reconnaissances, one artillery adjustment, five artillery surveillances, and three infantry liaison missions were carried out. Three bombing missions were executed. One enemy plane was brought down.

## ENEMY'S FORCES :

*Argonne to the Meuse.*—Visibility bad to fair. During the night enemy planes bombed Dun-sur-Meuse, Lion-devant-Dun, Haraumont, Breheville, Bras, Cumieres, Bantheville, and Haumont. During the day activity was moderate. A few formations of three to seven machines were observed on the Meuse and in the vicinity of Montmedy. Troops east of the Meuse were machine gunned by enemy planes. Enemy planes brought down one of our balloons. Hostile balloons inactive.

*General Impression.*—Considering weather conditions normal.

*The Meuse to the Moselle.*—Visibility poor. Twenty-six pursuit planes reported during the day. Three reconnaissance planes were reported west of Lake Lachaussee. Two balloons in ascension.

*General Impression.*—Defensive.

## DISTRIBUTION OF IDENTIFIED GERMAN AIR UNITS, NOVEMBER 10, 1918

Region.	Pursuit.		Reconnaissance.		Battle.		Bombing.	
	Nov. 9.	Nov. 10.	Nov. 9.	Nov. 10.	Nov. 9.	Nov. 10.	Nov. 9.	Nov. 10.
Flanders .....	8	8	9	9	2	2	6	6
Lys-Vimy .....	11	11	19	19	2	2	6	6
Vimy-Noyon .....	24	24	33	33	13	13	6	8
Noyon-Argonne .....	18	18	47	47	16	16	6	6
Argonne-Moselle .....	13	13	19	19	8	8	3	3
Moselle-Vosges .....	3	3	9	9	..	..	3	3
Vosges-Switzerland .....	5	5	7	7	..	..	..	..
Unlocated .....	3	3	21	21	1	1	..	..
Total .....	85	85	164	164	42	42	30	30

Total identified flights (all classes) on all fronts, November 10—347.

Total estimated machines belonging to such flights—2,992.

## EXAMINATION OF GERMAN AVIATOR, CAPTURED NOVEMBER 10, 1918

This pilot, together with an observer, Lieutenant Grafbonmetch, belonged to the 46th Bavarian Reconnaissance Flight at Briey and was flying a 200 H.P. Rumpler Maybach. He states that he was flying at 7,000 meters and side-slipped. As he was spinning down his observer fell out. He pulled the machine up at 3,500 meters when artillery fire forced his decision to jump from the plane with his parachute. The plane landed in a field southwest of Fontenoy, as did the pilot and observer. He states that his Flight made only deep reconnaissances for the Army "C" Detachment. They have been expecting the signing of the armistice for some days, and this morning his squadron commander told him that he did not want anyone to fly but those who wanted to take a voluntary "joy ride" might do so, as there would be a republic in Bavaria soon. He knew nothing about the withdrawal of German troops in the sector and set out to fly over the Toul-Nancy sector to observe circulation. He thinks that there are Austrians still in Metz.

## ALBATROS BIPLANE SCOUT

Type D 5a

MAXIMUM SPREAD.—29 ft. 8 in.

OVERALL LENGTH.—24 ft.

TOTAL MAIN PLANE AREA.—230 sq. ft.

**WING SHAPE.**—Upper and lower planes both cut back trapezoidal. There is no dihedral nor sweep-back and practically no overhang. Chord of upper plane considerably larger than that of lower plane. One set of "V" interplane struts like the Nieuport.

**AILERONS.**—On top plane only and unbalanced.

**RUDDER.**—Entirely above tail plane and is balanced. Rudder and fin together form a half heart.

**ELEVATOR AND TAILPLANE.**—Shovel shaped. Elevators balanced and in one piece.

**FUSELAGE.**—Oval in shape and comparatively deep. It is of 3-ply construction with no internal bracing wires. Gasoline tank is placed directly behind the engine.

**ENGINE.**—Mercedes 160 H.P., 6 cylinder stationary.

**ARMAMENT.**—Two Spandau machine guns fixed and synchronized, firing through the propellor. They can be fired simultaneously or independently. There is no protective armor.

Weight.—Plane and Engine.....	1,500 lbs.
Fuel .....	180 lbs.
Load .....	337 lbs.
Total.....	2,017 lbs.

**PERFORMANCE.**—Speed at 10,000 ft. 96 miles per hour, at 15,000 ft. 90 miles per hour. Climbs to 10,000 ft. in 13 min., to 15,000 ft. in 35 min.

**NOTE.**—This plane has been practically superseded on the front by the Fokker D7, but is still used extensively in Home Defense Flights for the purpose of protecting German towns against Allied air raids.

## SUMMARY OF OFFICIAL COMMUNIQUEES

NOVEMBER 10, 1918

### AMERICAN.

(November 10, 1918, morning.) Along the front of the First Army on the west bank of the MEUSE and from MOUTZAY to FESNES-en-Wœvre the night was marked by heavy artillery fire and by sharp machine-gun fighting.

(November 10, 1918, evening.) A series of local operations by the 1st and 2d American Armies resulted in considerable gains, today, at many points along the line between the MEUSE and the MOSELLE.

Troops of the 1st Army, with whom the French units are operating, reached the southern outskirts of Stenay and occupied Bois de Césnois, south of BAALON. Beyond the eastern slopes of the heights of the MEUSE, the villages of GIBERCY, ABAUCOURT and GRIMAUCCOURT were taken.

In the Wœvre, despite stubborn resistance from machine guns and heavy artillery, troops of the 2d Army penetrated the enemy's lines and drove him from several well-organized and strongly held positions. The towns of MARCHEVILLE and St. HILAIRE were taken and the Bois DOMMARTIN was cleared of the enemy.

### FRENCH.

(November 10, 1918, 11 a. m.) The pursuit was continued this morning under favorable conditions.

W. of MEZIERES our troops passed the SORMONNE River, taking the village of that name, and reached the HIRSON-MEZIERES road S. of RENWEZ.

On our right we crossed the MEUSE at additional points between LUMES and DONCHERY.

In his retreat, which is becoming more and more precipitate, the enemy abandoned everywhere large quantities of matériel. Especially between ANOR and MOMIGNIES we captured guns, numerous vehicles of all sorts, and entire railway trains.

(November 10, 1918, 9 p. m.) Pursuing the enemy's rear-guards, who have tried to offer a strong resistance at some points especially on the center and the right, our troops have made considerable progress during the day along the entire front. N. of the OISE we hold EPPE-SAUVAGE, 17 kilometers E. of AVESNES, and MOUSTIER-en-FAGNE. In Belgium we have advanced beyond BAILLEVRE and SALLES. Further E. our advance guards, in spite of the German's resistance which was marked in the wooded area N. of SIGNY-le-PETIT, have carried their lines to the N. edge of the forest of that name, in the region of La GRUERIE. We have captured MAUBERT-FONTAINE and reached a point 4 kilometers beyond Les RIEZES de MAUBERT as well as the heights N. E. of SEVIGNY-LA-FORET. The valiant Italian Corps operating further to the right, after having taken TREMBLOIS and RIMOGNE, has penetrated into the Bois des POTES, Bois d'HARCY, and are pushing vigorously ahead in the direction of BOURG FIDÈLE.

W. of the MEUSE we are progressing N. of the general line RENWEZ, MONTCORNET, ARREUX, DAMOUZY and BELAIR 2 1/2 kilometers N. of CHARLEVILLE. E. of MEZIERES the Germans violently counter-attacked the elements which had crossed the MEUSE in the region of DONCHERY; after a lively fight we repulsed the enemy and maintained our positions on the N. bank.

The matériel captured by our troops during the pursuit continues to increase. Automobile parks and stores of all kinds and a large number of railway cars have fallen into our hands.

### BRITISH.

(November 10, 1918, morning.) On the entire front our advanced elements maintained contact with the retreating enemy.

Our troops occupied the suburb of BERTAINTON on the southern outskirts of MONS. Farther N. we are approaching LEUZE and have taken RENAIX.

### ITALIAN.

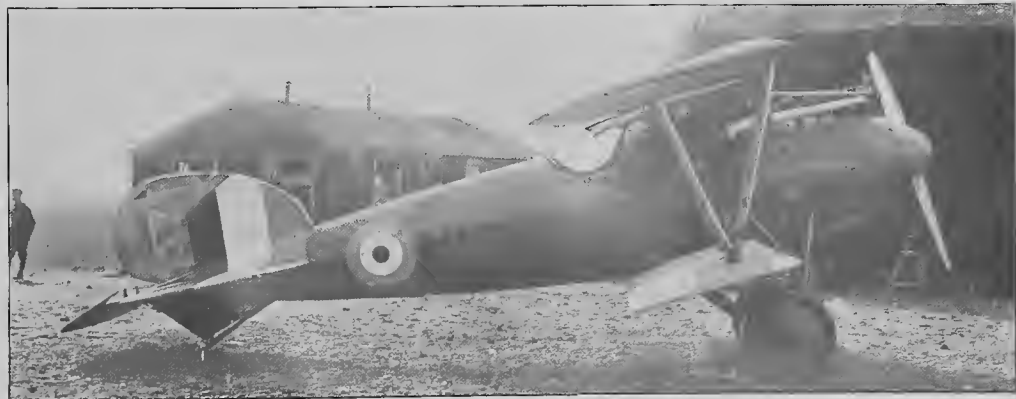
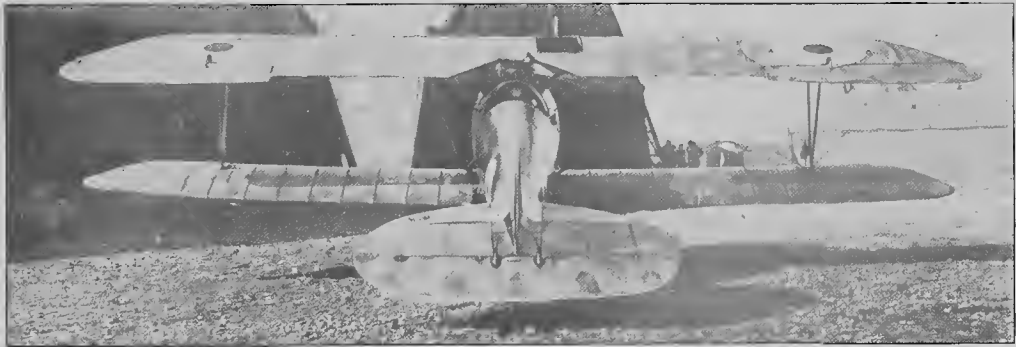
(November 10, 1918, 6.45 p. m.) Our troops are advancing towards the BRENNER in the ISARGO Valley, have occupied TOBLACH in PUSTERIA, and are proceeding towards the E. in the JULIAN and VENETIAN ALPS. No war event yesterday.

### GERMAN.

(November 10, 1918, 12.08 p. m.) Between the SCHELDT and the MEUSE the enemy followed up our withdrawal across the RHOSNES—LEUZE—St. GHISLAIN—MAUBEUGE—TRELON, and across the SORMONNE E. of CHARLEVILLE. On the heights E. of the MEUSE and in the Wœvre Plain numerous attacks of the Americans were repulsed.

FIRST QUARTERMASTER GENERAL GROENER.

(November 10, 1918, 7.30 p. m.) There is nothing new to report on the Western Front.



**ALBATROS SCOUT**  
**TYPE D 5a**





## SUMMARY OF AIR INFORMATION

### GERMAN AIRPLANES

(Eight photographs attached.)

#### FOKKER TRIPLANE SCOUT.

MAXIMUM SPREAD.—23 ft., 7in.

OVER-ALL LENGTH.—19 ft.

TOTAL MAIN PLANE AREA.—205 sq. ft.

WING SHAPE.—Practically rectangular in plane view, all three planes having equal chords, but wing spread decreases in lower planes.

AILERONS.—On top plane only and overhanging and balanced.

RUDDER.—Nearly circular in shape and balanced.

ELEVATORS.—Framework built of steel tubing welded at the joints and with usual cross-bracing wires. The frame is covered with fabric. Its cross section varies from round at the nose to rectangular back of cockpit.

ENGINE.—Siemens-Schuckert 160-h.p. Rotary.

ARMAMENT.—Two Spandau machine guns fixed and synchronized, firing through the propellor. They can be fired simultaneously or independently. There is no protective armor.

Weight.—Plane and engine.....	811 lbs.
Fuel .....	170 lbs.
Load .....	278 lbs.
Total.....	1,259 lbs.

PERFORMANCE.—Is said to be remarkable climber and to frequently attack from below. Its ability to dive is not so good but its general maneuvering qualities are pretty good.

#### PFALZ BIPLANE SCOUT.

##### *Type D-3*

MAXIMUM SPREAD.—30 ft.

OVER-ALL LENGTH.—22 ft.

TOTAL MAIN PLANE AREA.—230 sq. ft.

WING SHAPE.—Both planes trapezoidal in shape with upper plane larger than lower. Upper plane has no dihedral nor sweepback, while lower plane has slight dihedral. One set of "U" shaped interplane struts.

AILERONS.—On upper plane only and balanced.

RUDDER.—Above tail plane like Albatros but much higher. It is balanced.

ELEVATORS.—In one piece and not balanced. Tail plane and elevator combined are practically trapezoidal in shape.

FUSELAGE.—Oval in cross section and smaller than that of the Albatros Scout. Gasoline tank is placed at pilot's feet.

ENGINE.—Mercedes 160 h. p. six-cylinder stationary.

ARMAMENT.—Two machine guns (probably Spandau) fixed and firing through the propellor, can be fired independently or together.

Weight.—Empty .....	1,580 lbs.
Fuel .....	195 lbs.
Load .....	281 lbs.
Total.....	2,056 lbs.

PERFORMANCE.—Slightly inferior to Albatros Scout in speed and climb.

#### D. F. W. BIPLACE BIPLANE.

##### *Type C-I'*

MAXIMUM SPREAD.—42 ft., 3 in.

OVER-ALL LENGTH.—25 ft., 6 in.

TOTAL MAIN PLANE AREA.—455 sq. ft.

WING SHAPE.—Very similar to that of the Rumpler C-LV, except that there is no stagger. Radiator is mounted above central section of top plane.

AILERONS. On upper planes only and not balanced.

RUDDER.—Very similar to that of Rumpler except that in the D. F. W. it is balanced.

ELEVATORS AND TAIL PLANE.—"Fish tail" shape exactly like Rumpler but in D. F. W. elevators are balanced.

FUSELAGE.—Rectangular construction with curved top and bottom. Pilot has good forward view but his vertical view is restricted by the two planes. Gasoline tank is under pilot's seat.

ENGINE.—225 h.p. Benz.

ARMAMENT.—Spandau machine gun on right side of pilot, fixed and firing through propellor, and one machine gun mounted on observer's turret.

Weight.—Empty .....	2,178 lbs.
Load .....	761 lbs.
Fuel .....	405 lbs.
Total .....	3,344 lbs.

PERFORMANCE.—Climbs to 13,000 ft. in 33 min. Speed at 10,000 ft., 96 miles per hr., at 13,000 ft., 91 miles per hr. at 16,000ft., 85 miles per hr. Climb and speed superior to L. V. G. but inferior to Rumpler.

L. V. G. BIPLACE BIPLANE.

Type C-V

MAXIMUM SPREAD.—44ft., 8 in.

OVER-ALL LENGTH.—26 ft., 7 in.

TOTAL MAIN PLANE AREA.—460 sq. ft.

WING SHAPE.—Upper plane is slightly trapezoidal with rounded corners. The lower wings have very noticeable rounded tips with the trailing edge shorter than the leading edge. Both planes have a slight dihedral. There is no sweepback and no stagger. There are two sets of interplane struts on each side of fuselage.

AILERONS.—On upper wing only and balanced. The balancing portions project beyond the wing tips and are rounded.

RUDDER.—High like that of the Pfalz and balanced.

ELÉVATORS.—Tail plane and elevators like that of the Albatros and elevators balanced.

FUSELAGE.—Rectangular in section with curved top. General lines less tapered than those of the Rumpler. Gasoline tank under Pilot's seat.

ENGINE.—225 Benz.

ARMAMENT.—Spandau gun fixed and firing through propellor and Parabellum mounted on observer's turret.

Weight.—Empty .....	2,112 lbs.
Load .....	1,188 lbs.
Total.....	3,300 lbs.

PERFORMANCE.—Climbs to 13,000 ft. in 36 min. Speed 96 miles per hr. at 3,000 ft., 87 miles per hr. at 13,000 ft. Its performance is inferior to that of the Rumpler as it is slower on the climb and its speed is lower.

ALBATROS BIPLACE BIPLANE.

Type C-5.

MAXIMUM SPREAD.—42 ft.

OVER-ALL LENGTH.—30 ft.

TOTAL MAIN PLANE AREA.—440 sq. ft.

WING SHAPE.—Top plane is slightly cut back and the lower plane has distinctly rounded tips. Chords of upper and lower planes are the same. There is a slight overhang. There are two sets of interplane struts on each side of fuselage. There is dihedral but not sweepback nor stagger.

AILERONS.—On top plane only, are balanced and do no overhang the wing tips.

RUDDER AND FIN.—Similar to that of the Albatros Scout but a trifle more angular.

ELEVATORS AND TAILPLANE.—Standard Albatros shape.

FUSELAGE.—Rectangular with rounded top. Is rather slender compared to other machines of same type. Pilot is situated directly under center of upper plane but has good forward view. Gasoline tank is located under pilot's seat.

ENGINE.—225 h.p. Benz.

ARMAMENT.—One synchronized machine gun fixed and firing through the propeller and one movable gun mounted on observer's turret.

PERFORMANCE.—Rather slow and unwieldy.

A. E. G. BOMBER.

Type G-4.

MAXIMUM SPREAD.—60 ft.

OVER-ALL LENGTH.—32 ft., 4 in.

TOTAL MAIN PLANE AREA.—730 sq. ft.

WING SHAPE.—Aspect ratio is much lower than in either Gotha or Friedrichshafen machines. Gap s very large. There is practically no overhang, no stagger, a slight sweepback and slight dihedral.

AILERONS.—On top plane only. They are balanced and overhang the lower plane.

RUDDER AND FIN.—Triangular in shape. The rudder is very high and is balanced.

TAILPLANE AND ELEVATORS.—Comparatively wide and somewhat same shape as those of Fried - richshafen. Elevators are balanced.

**FUSELAGE.**—Like all bombers the fuselage is of rectangular section and has the appearance of being very wide and deep for its length. Main gasoline tank is under pilot's seat in central cockpit.

**ENGINES.**—Two 260 h.p. Mercedes, with tractor propellers.

**ARMAMENT.**—Three Parabellum machine guns, one mounted on forward cockpit and two in rear cockpit, one firing down and back through a gun tunnel and the other mounted on a turret. Owing to the size of the tailplane there is considerable dead angle of fire directly to the rear.

<i>Weight.</i> —Empty .....	5,258 lbs.
Total load .....	1,872 lbs.
Total.....	7,130 lbs.

**PERFORMANCE.**—Climbs to 9,000 ft. in 24 min. Speed at 5,000 ft., 90 miles per hr.; at 9,000 ft., 86 miles per hr.

#### FRIEDRICHSHAFEN BOMBER.

*Type G-3.*

**MAXIMUM SPREAD.**—78 ft.

**OVER-ALL LENGTH.**—42ft.

**TOTAL MAIN PLANE AREA.**—934 sq. ft.

**WING SHAPE.**—Both planes are noticeably swept back. Upper and lower planes are same size and shape. There is no stagger and no dihedral and no overhang. There are three sets of interplane struts in each wing outside of the central section.

**AILERONS.**—On both upper and lower planes. They are balanced.

**RUDDER AND FIN.**—Together are practically triangular in shape and very large. Rudder is balanced.

**TAILPLANE.**—Is "kite-shaped" and elevators are balanced.

**FUSELAGE.**—Very roomy with three cockpits all connected. It is rectangular in section; built of ply wood. Main gasoline tank is under pilot's seat in the center cockpit.

**ENGINES.**—Two 260 h.p. Mercedes.

**ARMAMENT.**—Three Parabellum machine guns. One mounted on a turret in each front and rear cockpit, and one pivoted on floor of rear cockpit firing down and to the rear.

<i>Weight.</i> —Empty .....	5,929 lbs.
Total load .....	2,717 lbs.
Total.....	8,646 lbs.

**PERFORMANCE.**—Climbs to 15,000 ft. in 54 min. with load or to 10,000 ft. in 25 min. Speed at 10,000 ft., 80 miles per hr., at 15,000 ft., 77 miles per hr.

#### GOtha BOMBER.

*Type G-5*

**MAXIMUM SPREAD.**—78 ft.

**OVER-ALL LENGTH.**—42 ft.

**TOTAL MAIN PLANE AREA.**—1,023 sq. ft.

**WING SHAPE.**—Has a slight sweepback and considerable dihedral. There is comparatively no overhang nor stagger. The gap is quite large. The aspect ratio is high. There are three sets of interplane struts on each wing outside of the central section. Auxiliary gas tank on central section of top of plane.

**AILERONS.**—On both upper and lower planes. Those on upper plane are balanced and overhanging.

**FIN.**—Triangular shape and is overhung by the rudder, which is very high and angular.

**TAILPLANE.**—Triangular in shape. Elevators are separated and are not balanced.

**FUSELAGE.**—Square in section, built up of wooden longerons and cross members, braced by cable and wire tension members. The covering is three ply. Fuselage contains three cockpits and the main gasoline tanks.

**ENGINES.**—Two 260 h.p. Mercedes.

**ARMAMENT.**—Three Parabellum machine guns, one for each front and rear turret and one firing through tunnel down and back from rear cockpit.

<i>Weight.</i> —Empty .....	5,500 lbs.
Fuel .....	880 lbs.
Load .....	3,322 lbs.
Total.....	9,702 lbs.

**PERFORMANCE.**—Speed at 15,000 ft., 78 miles per hr.

#### NEW TYPES OF AIRCRAFT

FROM BRITISH SUMMARY OF TECHNICAL AIR INTELLIGENCE, NOVEMBER 8, 1918.

**NEW TYPES.**—The following details have been obtained from a German print recently captured in France; the dimensions must, therefore, be considered as only approximate. The span of the main wings has in each case been taken along the rear spar; the chord of the upper wing was measured over the aileron near the wing tips, and that of the lower wing at a position as near the fuselage as possible after allowing for the fact that the trailing edge has, in some cases, been cut away at this point to improve the field of view:

PFALZ D.8.—This is a small tractor biplane fitted with a rotary engine. The span of the upper wing is slightly less than that of the lower ; both wings are cut back at the wing tips, with rounded corners to the rear end of the trailing edge, and are staggered. The fuselage is short and streamlined. The tail plane is small and trapezoidal and the elevator is in two portions.

Approximate dimensions :

	ft.	ins.
Span of upper wing .....	24	0
Span of lower wing.....	23	0
Chord of both wings.....	4	8
Stagger .....	1	11
Overall length.....	18	4

JUNKER C.I MONOPLANE.—The fuselage is rather long and tapers to the tail. The main wing has a wide chord ; it is not swept back and is square at the wing tips, but the trailing edge is cut away on either side of the fuselage. The ailerons are balanced and have extensions beyond the wings. The tail plane forms a wide-angle triangle. The elevator is one piece and rectilinear ; it is not balanced.

	ft.	ins.
Span including ailerons .....	40	0
Span without ailerons.....	36	0
Chord of wing at aileron compression rib.....	7	4
Chord of aileron.....	2	0
Span of tail plane at trailing edge .....	11	0
Overall length.....	27	0

PFALZ C.I.—This machine greatly resembles the Rumpler, but the tail plane is slightly different, having the shape of an isosceles triangle. The elevator is in two portions and is not balanced. Ailerons are fitted to both upper and lower planes.

Approximate dimensions :

	ft.	ins.
Span of upper wing .....	40	8
Span of lower wing.....	38	8
Chord of upper wing .....	6	0
Chord of lower wing .....	4	8
Stagger .....	1	9
Overall length.....	27	4

GOTHA G.L.7.— The central fuselage is long and tapers gradually to the tail ; there is a very small cockpit projecting slightly in front of the main wings. Two engines, driving tractor propellers, are mounted one on either side between the wings, but rather close to the fuselage, so that the paths of travel of the tips of the propellers come close together in front of the fuselage. The wings are not staggered and are slightly swept back ; there is an overhang to the upper wing. The tips of the lower wing are cut back, but those of the upper wing are square with rounded corners. Ailerons are fitted to both upper and lower wings ; the former are balanced by a portion projecting beyond the wing tips, the latter are not balanced. The undercarriage is wide and has one wheel under each engine unit. The tail plane is small and is a wide-angle triangle in shape. There are two rudders, mounted at the trailing edge at the extremities of the tail plane. A single rectilinear elevator is mounted at the trailing edge of the tail plane between the rudders. It is believed that there are two fins above the tail plane, one in front of each rudder.

Approximate dimensions :

	ft.	ins.
Span of upper wing with ailerons .....	62	0
Span of upper wing without ailerons .....	59	0
Span of lower wing.....	57	4

GERMAN SERVICE OF SURVEILLANCE OVER ENEMY AVIATION

FROM THE OPERATIONS SECTION OF THE ROYAL ITALIAN ARMY, OCTOBER 29, 1918.

*German Service of Surveillance Over Enemy Aviation.*

The German Command on the Western Front has constituted a special service for the surveillance over the enemy aviation (*Flugmeldedienst*) ; a service which has been wholly adopted also by the Austrians, as is shown by a document of the Army of the Isonzo, and reprinted in Pamphlet II of "The Battle of the Piave", published by the Information Office of the 3d Army.

*Purpose of the Service.*

- (a) To watch all machines that fly in the zone of operations or of communications. To transmit immediately the information obtained which permits of ascertaining the line of flight of the aircraft, both coming and going.
- (b) To make it possible for effective measures to be taken in time, and to facilitate by all methods the work of the anti-aircraft defense and of the chasing aviators.
- (c) To aid, in the case of a landing behind our lines, in the capture of the enemy machines and their crews.
- (d) To capture the bundles dropped by the enemy aviators (for example), bundles dropped by means of parachutes, which usually hold carrier pigeons.

*Organization of the Service.*

In every army sector there are two organizations working in the service of surveillance over aerial activity ; the surveillance posts (*Flugwachen*) and the centers of information (*Flugweldestationen*) which communicate with each other by means of telephone.

The surveillance posts and the centers of information are supported upon the successive lines of surveillance which the anti-aircraft defense has constituted in every army sector (lines of anti-aircraft defense are usually five).

The posts of surveillance over aerial activity are established for the greater part at all anti-aircraft cannons in position, at all aviation formations, at all centers of formation on aerial activity equipped with observers, and in all the high places which have a good field of sight.

The centers of information are established along the successive lines of the anti-aircraft defense and each center is entrusted with the surveillance over a definite sector.

#### *Duties of the Look-out Posts.*

Surveillance night and day.

Reporting the approach of an airplane :

- (1) To the center of information with which the post is telephonically connected.
- (2) To the surveillance post or to the center of information of the zone next to one over which the airplane is flying.
- (3) To the posts of liaison with the flanking armies.

If it is ascertained that an attack is to be made by an enemy squadron, it must be reported to the Commands and the troops in that locality and in the ones near it.

#### *Duties of the Centers of Information.*

They have the same duties assigned to them as to the surveillance, and, if necessary, order new observations. They also collect the information gathered in the lines nearby and transmit it to all the surveillance posts of the same line.

#### *Special Instructions for the Centers and Posts of Surveillance of the First and Second Lines of Surveillance.*

(a) As a rule the look-out posts are to report only the machines which are flying over their own zone, the zone of operations, or the zone of communications.

The enemy machines which remain above their own lines are not to be reported.

(b) The aviation units can inform themselves of the activity engaged in by the enemy aviation over its own lines from the observations of the more advanced anti-aircraft cannon sections.

(c) The centers of information must transmit all the information collected to the posts situated in the sector assigned to them. The exact time at which the information was received and transmitted must appear in the reports.

#### *\* Surveillance Over the Service.*

The surveillance over the service is entrusted to an officer who is under the orders of the General Staff Officer of the Anti-Aircraft Defense.

NOVEMBER 7, 1918.

NEW SERIES—No. 72

## BULLETIN OF THE INFORMATION SECTION (FRENCH G. Q. G.)

### THE FUTURE OF THE AIR SERVICE AFTER THE WAR

Today our aerial army, in first-class shape, is materially contributing to victory. For four years its orientation has been exclusively military and it has shown what could be expected of its efforts and its spirit of sacrifice. It has solved the problems of the present. The problems of the future remain, and, even at this moment, they deserve the attention of everyone.

After the war, will aviation be able to exercise its activity, as was the case before the war, only in the realm of sport? Will the workmen, who worked in the aviation factories and repair shop (people, all more or less specialists), be compelled to remain idle, or turn their attention to other industries? As for the marvellous pilots, observers, and photographers that the war has brought to the fore, who will not have had time to give full evidence of their ability,—what employment will they find for their activity? What use will they be able to make of the very specialized science and the precious experience they will have acquired at the risk of their lives?

THE TRANSITION PERIOD AND THE NEW AIMS OF AERONAUTICS.—It seems that it would be regrettable if the progress realized during the war in aeroplane construction were to remain unfruitful, and if the marvellous advance of aeronautics were suddenly stopped. On the contrary, it is desirable that, profiting, in a sort, by the momentum acquired and the experience dearly paid for, aviation, after having been merely a sport at its birth, then a magnificent instrument of war, should turn more and more to commercial or scientific purposes. This solution would be doubly profitable, as it would avoid a brusque deplacement in the equilibrium in French industry, and, at the same time, would favor human progress. For shops that have specialized in aviation construction do not have machinery which is always capable of adaptation to any branch whatever of mechanical construction. Doubtless factories making aeroplane motors could make automobile motors, even though aeroplane motors are much different ; but, as for the shops making the aeroplane, properly so-called, their adaptation to another kind of construction is not so easily conceived, with the possible exception of wagon-making.

Accordingly, what are the new aims which it is possible to assign to aeronautics?

If we compare it with other means of transportation, the aeroplane possesses the following superior qualities, and these point out the road it is to follow in the future :

1. The aeroplane can traverse, in any direction, the most inaccessible continents, without regard to ordinary topographical hindrances.

2. The aeroplane can travel great distances three or four times more quickly than any other method of locomotion.

EXPLORATION AND LIAISON.—First of all, the aeroplane, by means of aerial photography, could render very great services in obtaining, a map of unknown regions. It seems that, following the same line of thought, the dirigible and the captive balloon (which gave good account of themselves during the

war) are also called upon to render similar services. As their stability is greater, on board them there can be used more precise instruments, which will result in more correct observations.

Besides, the aeroplane could be employed in the colonies as a means of communicating with and provisioning the outposts. It is well known how slow it is to transport provisions by caravans or carriers, and the high cost of this method of transportation. While awaiting the building of railroads,—an operation which is always costly, and from which the full efficiency can be expected only after a long period—the air routes are open to every one, without building or repairing expenses. It suffices to have a few hangars at the terminus, a few landing places along the route, and a sufficient supply of machines.

**COMMERCIAL TRANSPORTATION.**—In the countries that are best provided with means of transportation by railroad, the speed of the aeroplane justifies the consideration of its use for commercial purposes, when the question of time is at stake.

The transportation of mail is an instance in point. A considerable progress would be realized if, all through France, for instance, on the principal and on the longest routes, the carrying of urgent letters, of certain samples, and small packages did not require more than a few hours. The public would willingly consent to pay supplementary taxes to obtain the benefit of a rapid delivery.

If aeroplanic postal service and the use of aeroplanes for commercial purposes seems, even now, realizable, the same can not be said, perhaps, of the use of aeroplanes for the transportation of passengers. People must get accustomed to getting into an aeroplane, the same as they get into a railway carriage or an automobile. We can foresee that such will be the case as time goes on, and that commercial transportation service, regular and uninterrupted, will be established little by little in all countries.

**PROJECTS AND EXPERIMENTS.**—We have seen (Bulletin No. 57) that the aeroplane is already used in our colonial empire as a means of geographical exploration and of liaison between posts separated from each other by hostile elements. The first experiments in this line seem to have been made in Morocco on the initiative of General Lyautey. The most satisfactory results were obtained.

As for the establishment of regular aeroplane transportation service, this has already been the object of study in several countries.

About the middle of 1917 various organs of the aeronautic press pointed out that German activity was being devoted to the organization of After-war, and that one could detect the appearance of the idea of an immense trust of aerial enterprises, under the auspices of the Central Powers. Indeed, a motion was presented in the Reichstag, whose aim was the organization of an international society for the exploitation of traffic on a vast network of air routes. This motion even formulates a new code of legislation for aerial circulation, to be submitted for the approval of the different governments.

The Austrian Government, during the war, seems to have contemplated an aerial courier service between Hambourg and Constantinople.

The same tendencies have been revealed among the Entente nations; a very serious movement has been started in preparation for the future, and even preliminary attempts have been made.

In America, for a long time the possibility of crossing the Atlantic has been under consideration; the first result obtained has been the study of large-size machines, specially suited for commercial purposes. There were also made, with the Government's assistance, attempts at aerial postal service on different routes in Alaska and Massachusetts.

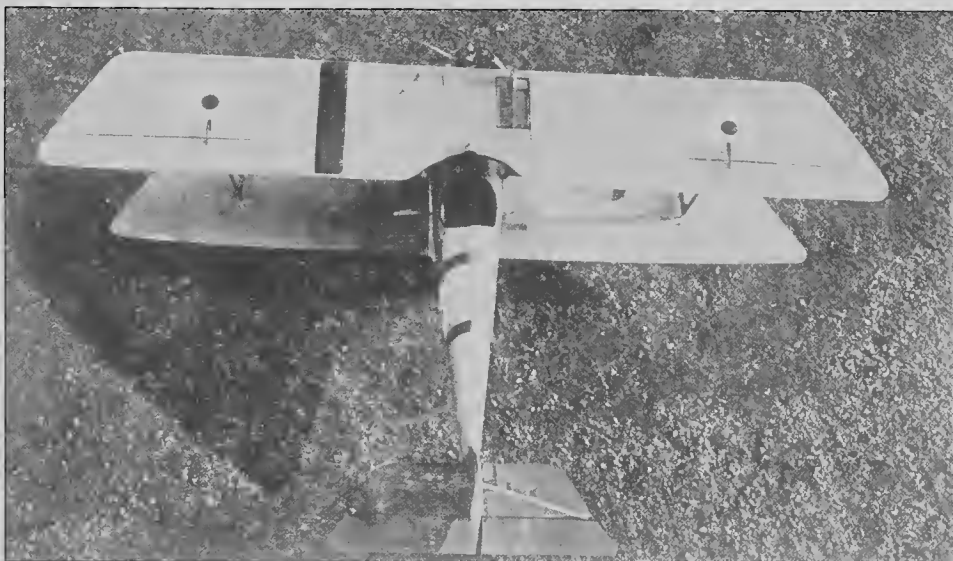
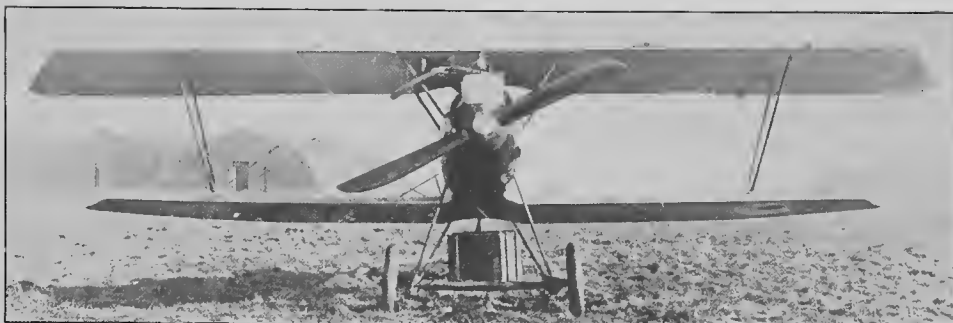
In Italy, a Company of International Aerial Transportation was formed, with a capital of 1,000,000 liras, with the support of the principal banks of the kingdom and of the Savoia Society whose principal business is aeronautic construction. At the end of May, 1917, a first attempt was made between Turin and Rome, with a Pomilio machine, of standard type, slightly changed to permit the storing of 200 kilograms of letters and envelopes. The use of this machine, which was furnished with a 280 h.p. Fiat motor, furnished useful information. It took four hours and thirteen minutes to cover the actual distance—600 kilometers. It was done at a speed of 150 kilometers an hour, with a total consumption of 300 liters of gasoline and 30 liters of oil.

In England, the experiments have been conducted with the practical sense which our allies use in all their enterprises. There already exists a good machine for heavy cargoes, and the conditions of exploitation of the future line, London-Paris-Marseille, have been closely studied. The English Government and the Dominions heartily encourage the efforts of inventors and manufacturers who endeavor to solve these important problems.

Finally, in our own country also, these questions are being studied, and routes for rapid postal transportation have been considered by the Postal and Telegraph Service.

There is still much to be done to bring aeronautics down to the level of every one. The future companies of aerial transportation must find in the regulations on the police of the air, guarantees against competitions that might possibly be dangerous. Their part shall be to submit to the permanent control of an international authority which at present does not exist. As for the type of aeroplane suitable for the public service which is in contemplation, it is unnecessary to say that it must fit conditions very different from those which conspired in the creation and perfection of the war planes. It will be no longer necessary to consider great speed, maximum height, a great capability for maneuvering; what must particularly be developed are the means of safety.

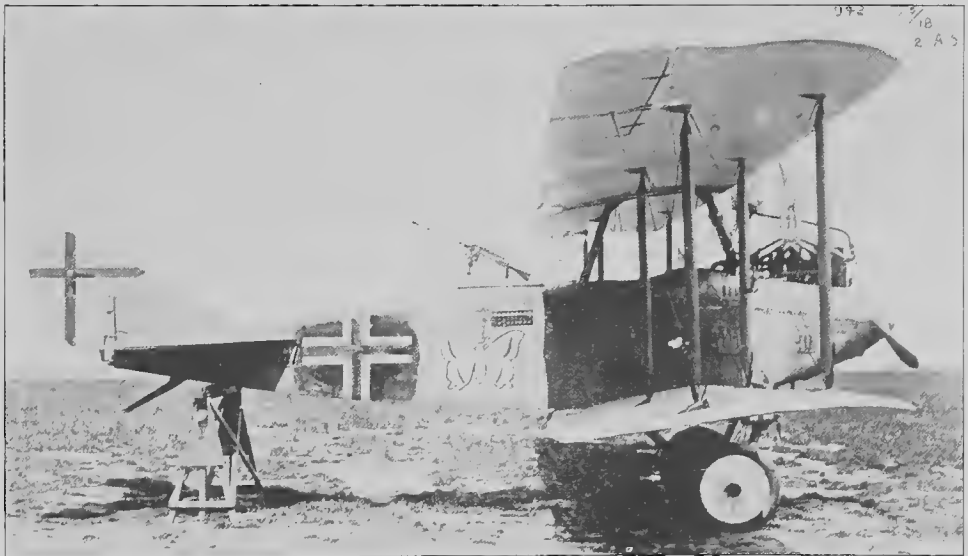
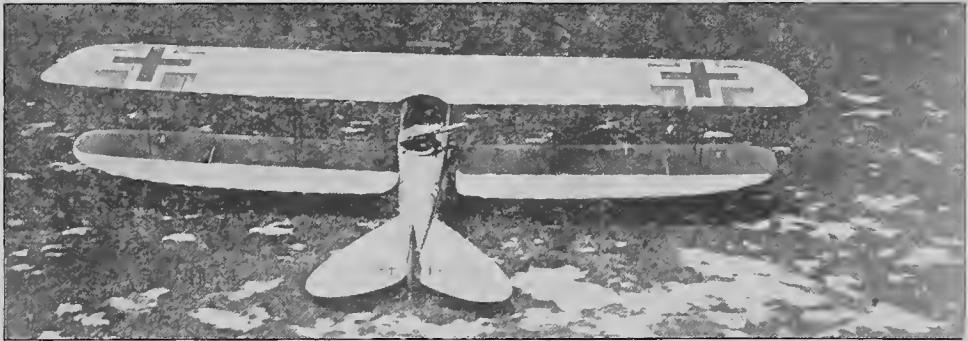
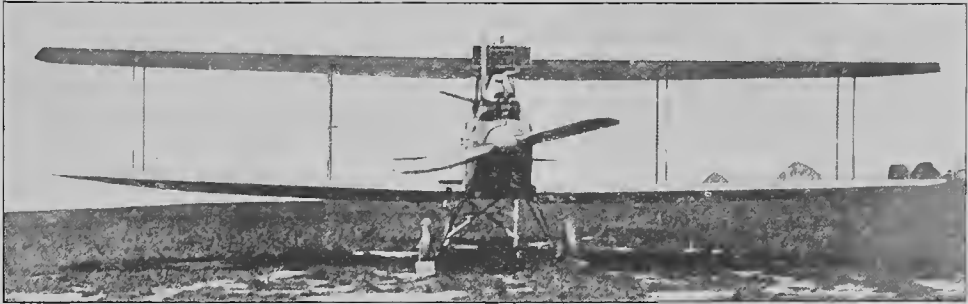
From this point of view (without doubt, the most important for the commercial future of aeronautics), the greatest hopes seem to be justifiable. For even though the considerable progress realized during the war in aviation was not directed towards obtaining greater security, it is to be observed, however, that the accidents that happen, apart from the risks of war, are confined, in a large proportion to the flights of learners in the aviation schools, rather than to the flights of experienced pilots, performed even in the worst atmospheric conditions. Therefore, there is reason to believe that after the war, thanks to the effort of engineers and manufacturers, aided by the public authorities, the reputation which aeronautics enjoyed for years will not pass away, and that French aviation, which realized wonders during the war, will cover itself with a new glory in the works of peace.



**PFALZ SCOUT**  
**TYPE D 3**

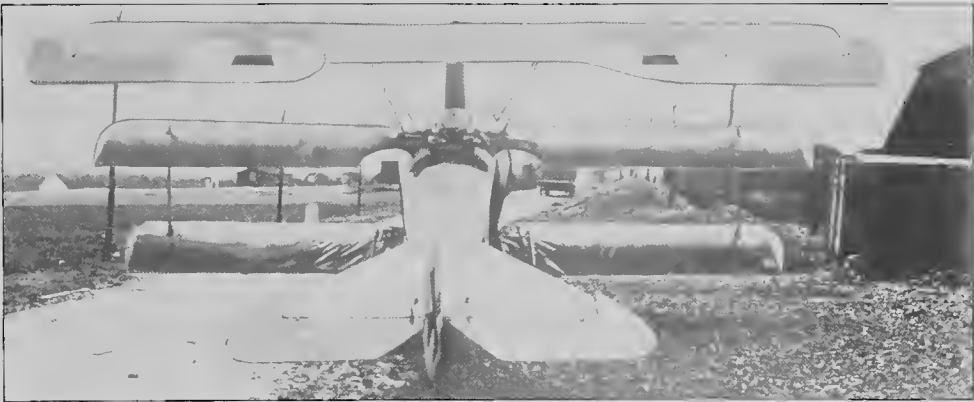
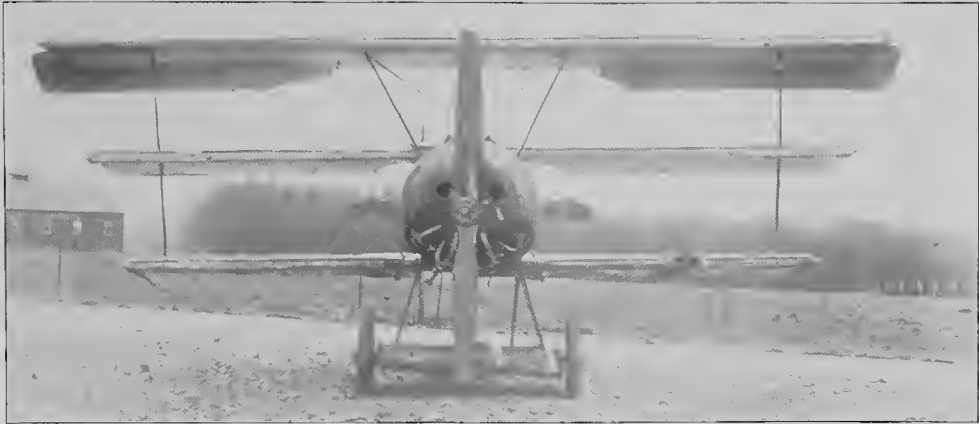






**D. F. W. 2 SEATER  
TYPE C 5**





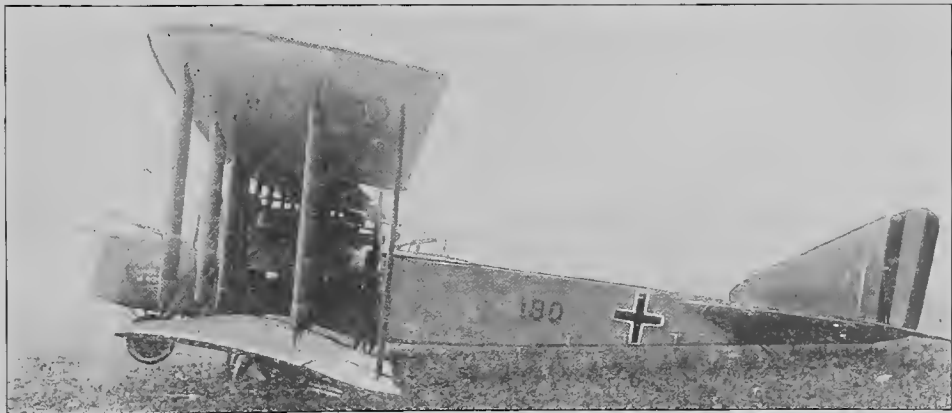
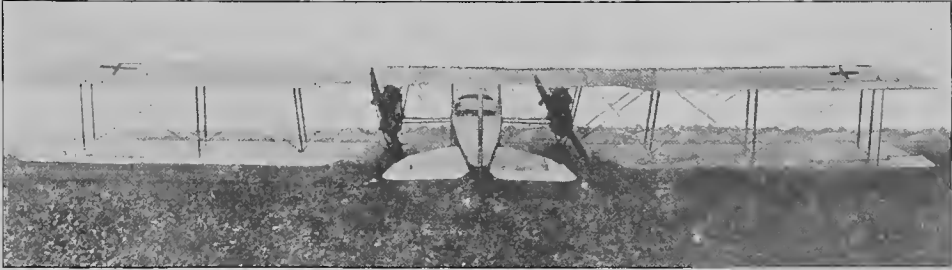
**FOKKER TRIPLANE SCOUT**  
**TYPE DRL. 1**





**ALBATROS TWO SEATER**  
**TYPE C 5**





**FRIEDRICHSHAFEN  
BOMBER  
TYPE G 3**

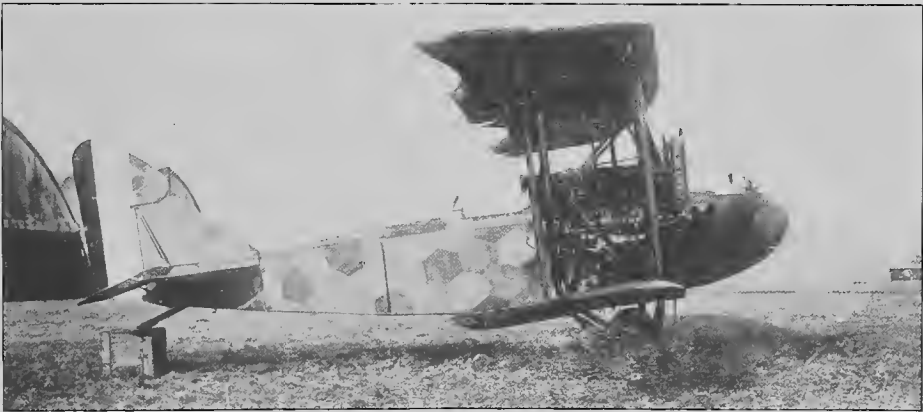
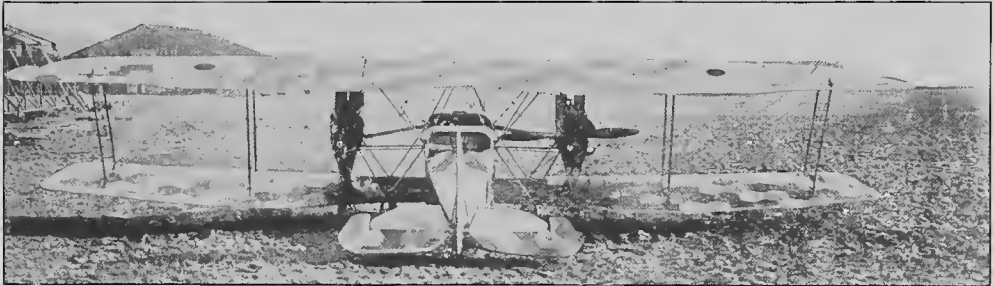
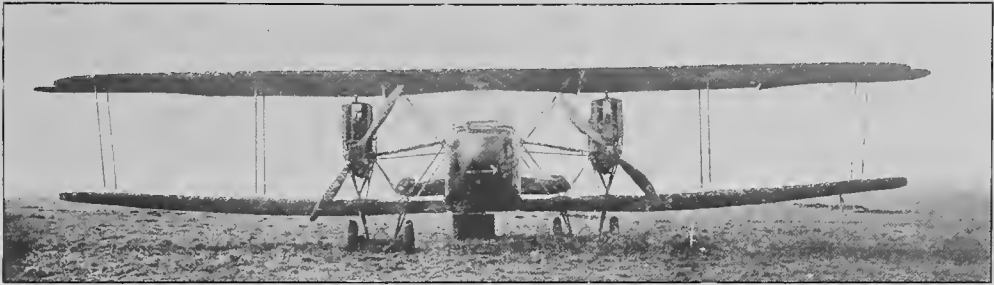






**GOTHA BOMBER**  
**TYPE G 5**





**A. E. G. BOMBER  
TYPE G. 4**



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